Which Statute to Implement? Strategic Timing by Regulatory Agencies

Abstract

A critical though underexplored decision that regulatory agencies make is their choice of which statutes to implement as they set their regulatory agenda. In a standard positivist framework, strategic agencies should be expected to implement statutes of varying partisan origins in order to satisfy the ideological preferences of their political principals—conservative principals, for example, may prefer regulation that implements statutes passed by conservative coalitions. In this paper, I demonstrate that regulatory agencies can choose different statutes to prioritize and I present empirical evidence that this choice changes with party control of political institutions. The use of statutory deadlines by enacting coalitions to insulate agencies from such politically motivated implementation schedules does not alter the empirical patterns.

1 Introduction

To what extent do regulatory agencies cherry pick the implementation of congressional statutes? The nature of the US regulatory system—where agencies typically have the discretion to spend years (or decades) turning a single statutory directive into a regulation—fosters a precarious relationship between congressional intent and policy outputs. Congress naturally must worry about whether a statute will be faithfully implemented. Equally consequential, although arguably less appreciated, is that a delegating Congress should also worry about timing: when will an agency make use of a statute to set policy, and when will they cast the statute aside to let it sit dormant. The discretion agencies have to time the implementation of statutes poses considerable challenges to the predictability and desirability of policymaking in modern democracies, though no research to date has subjected these dynamics to systematic analysis.

The ability of agencies to choose amongst statutes is partly facilitated by the practice of repurposing older statutes to address new regulatory opportunities. Consider the Environmental Protection Agency's (EPA) current high-profile efforts to use a decades-old law (the Clean Air Act) to regulate a previously unanticipated environmental threat (greenhouse gases). As I show in the upcoming analysis, statutes remain potent sources of regulatory authority decades after they are enacted. As a result, regulatory agencies have accumulated thousands of directives during Congress's long history of ceding policymaking authority, thus providing regulators with a robust menu of potential policy moves.

In this paper, I analyze how regulators prioritize some statutes over others in order to achieve different policy goals—a behavior I refer to as the exercise of *inter-statutory* discretion. My focus on discretion ties this paper to a separate, albeit related, literature that

¹See Coral Davenport. "Republicans Vow to Fight EPA and Approve Keystone Pipeline." New York Times. November 10, 2011.

analyzes the extent to which regulators can choose amongst policies based on the constraints set by Congress (Huber and Shipan 2002; Epstein and O'Halloran 1999). I add to this literature by highlighting that regulators have discretion not just to choose policies within statutes, but also the discretion to choose policies across statutes.

In order to shed light on the dynamics of inter-statutory discretion, I introduce a new dataset that allows scholars to study when regulators have implemented particular statutes over time. I look at twelve of the most prolific social regulatory agencies over a period from 1984 to 2010. Notably, I find lengthy time lapses between the passage of a statute and the development of relevant implementing regulations, with agencies averaging up to a 20-year gap during the years I study. I also find that agencies tend to implement more statutes than they are typically associated with, at least relative to their core authorizing statutes.²

Given that statutes are designed in ways to constrain the range of feasible policy options (McCubbins, Noll, and Weingast 1987; Bawn 1997), agencies may have incentives to implement different statutes depending on their political environment. Such strategic maneuvering is implicit in the research on Federal Trade Commission (FTC) case selection by Weingast and Moran (1983) who study how different statutes empower the agency to bring suit against *inter alia* anti-competitive merger activities (the Clayton Act), deceptive business practices (the Truth in Lending Act) and the protection of small business interests (the Robinson-Patman Act). Similarly, my goal in this paper is to look at how agencies address this fundamental tradeoff between regulating under different congressional mandates, albeit

²Amongst the agencies I analyze, the average number of statutes implemented per agency is 47, although an agency's emphasis is typically on implementing its core statutes. For example, the Clean Air Act of 1990 is a core authorizing statute for the EPA, whereas the Regulatory Flexibility Act of 1980 is not, though the EPA implements both statutes. See Table 10 in Section C.1 of the appendix for details on all the statutes implemented by the EPA.

across a much larger range of agencies and activities.

My main analysis reveals how regulators implement statutes in ways that suggest a systematic responsiveness to the contemporary political environment. Depending on party control of government, regulators have favored implementing statutes that were initially enacted with more Republican or Democratic support. For example, Republican presidential administrations and Republican control of Congress coincide with agencies implementing more conservative statutes, or those statutes that were passed with more Republican support in Congress. Conversely, unified Democratic control of government is associated with agencies implementing more liberal statutes.

Perhaps an enacting coalition's most appropriate tool, at least theoretically, to curb these patterns of partisan implementation is to set deadlines within a statute to specify when a regulatory action must be completed. However, when I repeat my analysis on the subset of regulations that have statutory deadlines, I find exactly the same empirical patterns. As I discuss more in the paper, deadlines are often missed and are difficult for Congress to enforce, either unilaterally or with the help of the courts. Furthermore, regulations with statutory deadlines are likely to be precisely the kinds of regulations that political actors care about, thus subsequent congresses and presidents may have added incentives to purposefully delay or expedite their implementation.

Finally, my analysis also demonstrates that Republicans have had a disproportionate influence over the types of statutes implemented. More *conservative* statutes are implemented when the Republicans control either the presidency or Congress, whereas Democrats need unified control over government to ensure more *liberal* statutes. In order to make sense of these asymmetric findings, I interpret the empirical results within the framework of a simple agenda-setter model (Romer and Rosenthal 1978). If one assumes that the Republicans have a status quo bias relative to the Democrats and that both parties want at least some regulation, these asymmetric results make a lot of sense. Republicans can use presidential review

(Acs and Cameron 2013), or the appropriations process in Congress (Macdonald 2010), to prevent policy shifts that are too liberal, or shift too far from the status quo. Democrats would act the same way, but they will not veto the modest policy shifts preferred by the Republicans since they are always an improvement over the status quo.

2 Inter-Statutory Discretion

To illustrate how inter-statutory discretion plays out in practice, consider the following example of rulemaking under the National Highway Traffic Safety Administration (NHTSA).³ The NHTSA has been tasked by Congress to regulate automobile fuel economy policy through a variety of overlapping statutes.⁴ For example, the agency can set fuel economy standards (CAFE standards) using statutes that were supported disproportionately by Democrats in Congress, namely the Energy Policy and Conservation Act of 1975 and later the Energy Independence and Security Act of 2007. Alternately, the agency can provide manufacturing incentives for more fuel efficient automobiles by promulgating rules under the Alternative Motor Fuels Act of 1988, which was passed by voice vote and later amended by the Energy Policy Act of 2005, which was disproportionately supported by Republicans in Congress.

In general, Democrats have supported new CAFE standards, Republicans have opposed them and both parties have been at least somewhat supportive of manufacturing incentives. Patterns of rulemaking activity by the NHTSA confirm these partisan trends, with new CAFE standards only emerging during unified Democratic control of government and with manufacturing incentives only emerging during periods of unified Republican control and divided government. For the Clinton administration, manufacturing incentives were

³Rulemaking is the formal process by which agencies interpret congressional statutes and develop regulations.

⁴See 49 U.S.C. 32901 et seq.

a second-tier option given that Republicans in Congress had restricted spending on any rule that would increase CAFE standards. Policymaking at the NHTSA provides just one example of how agencies selectively implement statutes under political constraints.

Theoretically, such selective implementation is not surprising. For starters, regulatory agencies are typically empowered by multiple statutes (dozens in some cases) that delegate authority to achieve different policy goals. Notably, these statutes oftentimes contain little, if any, guidance about which directives to prioritize within statutes, not to mention which statutes to prioritize when an agency has been tasked with implementing more than one (Lazarus 1991). Congress does occasionally set deadlines for issuing new rules, but the limited ability of Congress to discipline noncompliance, and the willingness of the courts to provide deference to agencies that miss deadlines, gives agencies considerable leeway in timing the implementation of statutes (Magill 1995). Finally, studies that rely on interviews of careerists involved in the rulemaking process have found that an agency's agenda is shaped both by the supply of statutes that Congress tasks an agency to implement—as to be expected—in addition to stimuli from political actors and interest groups that pressure agencies to alter the timing and scope of implementation (West and Raso 2012; Golden 2003; McGarity 1991).

Suggestive evidence of inter-statutory discretion is also apparent in the long duration between the passage of statutes and their implementation. Many regulatory statutes are designed, in theory, to initiate a burst of regulatory activity upon passage that fades away when the relevant tasks are complete. In practice, agency rulemaking does not always follow this boom-and-bust cycle. Many regulatory statutes remain productive long after their passage, as agencies continue to rely on their authority to accomplish new policy goals. For

⁵West and Raso (2012) find that 60 percent of the rulemakings they study (167 rules out of 276) were categorized by respondents (careerists in the agency) as being "discretionary" policy changes.

example, the EPA under the Obama Administration is able to (and does) write regulations using statutes passed during the Carter Administration.⁶

Inter-statutory discretion is the theoretical latitude regulators have to implement different statutes in order to exercise different policy options. In practice, regulators face external pressure to exercise this discretion in specific ways, largely due to predictable interventions from political appointees, the White House and Congress. As a result, the *de jure* discretion agencies have to choose amongst statutes may not be reflected in their *de facto* discretion, as political pressure may narrow an agency's range of choices.

2.1 Agency Decision-Making under Political Constraints

Statutes permit regulatory agencies to legally move policy. Without statutes, rulemaking efforts would surely be struck down by the courts on the grounds that the regulation is "in excess of statutory jurisdiction, authority, or limitations, or short of statutory right," known as an "arbitrary and capricious" ruling.⁷ Even with some statutory support for an action, agency rules can be struck down on the grounds that the agency is overstepping what the statute permits.

Yet the threat of court action is not the only constraint agencies face. When agencies choose statutes and develop policy, they are engaged in a strategic relationship with their political overseers, including external actors like the president and Congress (Ferejohn and Shipan 1990), as well as political appointees internal to the agency (Lewis 2008). In the same way that agencies would not want to make a costly investment in a rule only to have it struck down by the courts, agencies would not want to invest in a rule only to have it held

⁶See Table 9 in Section C.2 of the appendix for a list of the EPA's most commonly implemented statutes by administration.

⁷See the Administrative Procedures Act, 5 U.S.C. 702 - Scope of Review.

up indefinitely by a limitations rider (Macdonald 2010), overturned by Congress (Shipan 2004), threatened by budget cuts (Carpenter 1996) or effectively vetoed by the regulatory review process, either within an agency (such as the Office of Policy at the EPA) or at the president's Office of Information and Regulatory Affairs (Moe 1985).

As agencies decide which policies to pursue, they may selectively implement statutes in order to prioritize more liberal or conservative policy goals. Agencies exercise such discretion either because they anticipate the preferences of their political environment, or because a political overseer directs the agency to achieve a policy goal that explicitly requires the use of a statute. These two manifestations of inter-statutory discretion are observationally equivalent, and are both products of the intersection between political control and the implementation of statutes.

Existing evidence on agenda setting within agencies suggests that instances where the president or members of Congress urge agencies to act are relatively rare (West and Raso 2012; Bressman and Vandenbergh 2006), and that careerists play a considerable role setting their own regulatory agenda, either with the involvement of political appointees or without (McGarity 1991).⁸ The political environment is, however, well positioned to play a reactive role to agency proposals, as evidenced in part by the large proportion of agency rules that are reviewed by the White House (Acs and Cameron 2013). In light of these studies, it may be more common that inter-statutory discretion involves agencies taking the lead to strategically select which statutes to implement, and that the external environment reacts when necessary with vetoes and sanctions along the lines previously discussed.⁹

Exercising inter-statutory discretion is distinct from exercising *intra*-statutory discretion,

⁸McGarity (1991) finds from surveys of bureaucrats that EPA rulemaking often involves initial decisions being made deep within the career staff of the agency, but that these decisions are later checked and scrutinized by the political process.

⁹Though see Kagan (2001) for examples of presidential directives that spurred rulemaking.

where an agency would regulate under the same statute regardless of the political environment, but may change the stringency or scope of the regulation either in anticipation of political pressure or due to direct political intervention. A complete theory on the tradeoffs between exercising inter- and intra-statutory discretion is beyond the scope of this paper, although I highlight here that these are separate mechanisms by which agencies may respond to political pressure. In short, it is likely that the two strategies are substitutes, where agencies may be more inclined to exercise inter-statutory discretion if statutes themselves permit few policy options.

Political pressure may also shape whether an agency regulates in the first place. Interstatutory discretion obviously implies forestalling the implementation of some statutes, as evidenced by the NHTSA example. Interestingly, however, the number of regulations finalized by agencies each year is fairly steady, and does not systematically shift in obvious partisan ways, even for perennially contentious agencies like the EPA.¹⁰ This suggests that while external pressures may influence the types of regulations an agency develops, such as the statutes implemented, it does not appear to push agencies to eschew regulating altogether.

In this paper, my focus is on uncovering the extent to which agencies implement different statutes depending on their political environment. Empirical patterns on the implementation of statutes over time could yield the following conclusions:

Case 1 Evidence of Ideological Statutory Implementation

A relationship between the types of statutes agencies implement and the contemporary political environment would suggest that agencies do exercise inter-statutory discretion. Such a relationship might include evidence that regulators were more likely to implement statutes

¹⁰See Figure 4 in Section C.1 of the appendix for a list of the counts of rules per year for each agency in this study, which largely confirms this pattern.

of conservative orientation during periods of Republican presidential control. Agencies may exercise such discretion strategically because they anticipate the preferences of their overseers, or they may act in response to an overseer's directive.

Evidence that agencies are engaging in inter-statutory discretion does not mean that this is the only way in which agency decision-making is shaped by politics. It is certainly possible, and likely, that agencies exercise a combination of both inter- and intra-statutory discretion. For example, presidents may direct agencies to selectively implement a statute and pressure the agency toward a politically motivated interpretation of the statute.

Case 2 No Evidence of Ideological Statutory Implementation

The absence of a relationship between the ideological orientation of implemented statutes and the contemporary political environment suggests the following conclusion: agencies do not exercise inter-statutory discretion in systematically political ways, but they may exercise intra-statutory discretion in response to, or anticipation of, political pressure.

The lack of evidence for ideological statutory implementation could mean that statutes themselves tend to not have meaningful ideological orientations, thus allowing agencies to use seemingly liberal statutes to set conservative policies and vice-versa. Alternately, agencies may not *strategically* propose rules under statutes of different ideological orientations, in which case political overseers are coerced into bargaining with agencies to exercise intrastatutory discretion before approving a rule. In either case, if agencies are at all responsive to their political principals, then an absence of evidence for inter-statutory discretion suggests that agencies are instead exercising intra-statutory discretion.

It may also be possible that agencies do not use inter- or intra-statutory discretion in response to the political environment, i.e. agencies are politically insulated. Thus agencies are promulgating roughly the same number of rules year to year, as existing evidence suggests, while implementing statutes of similar ideological orientation and resisting political pressure

to modify rules. This conclusion, however, belies that vast apparatus of political control that surrounds the rulemaking process, as well as evidence that regulators do bend to external pressure (Yackee and Yackee 2008; Balla 1998).

3 Data

A key contribution of this paper is to provide a new dataset that links the behavior of regulators to the congressional statutes that empower them. I develop a way to systematically focus on the statutes regulators implement by collecting data on the legal authority that agencies rely upon when promulgating rules. In practice, each time an agency plans to take a regulatory action, they are required to cite the statute, or relevant section of the U.S. Code (the Code), that authorizes the action. By collecting data on each rule's statutory genesis, I am able to link all regulatory actions back to the congressional coalitions that gave power to the agency, and to develop a proxy measure for a rule's *ideological orientation* based on partisan support for the relevant statutes.

Constructing the dataset was made possible by the availability of two sources. The first is the *Unified Agenda of Federal Regulatory and Deregulatory Activity* (the Unified Agenda), which provides information about the statutes implemented for each new rulemaking.¹¹ In the Unified Agenda, agencies either provide the name of the statute or they list the relevant section of the Code where the statute has been assigned.

The second source is a digitized version of the Code maintained by the Office of Law Revision Counsel (the OLRC data) that contains information about which statutes contribute language to each section of the Code. I took all the Code citations from the Unified Agenda and matched them with the OLRC data. By linking the Unified Agenda and OLRC data, for any given section of the Code that an agency lists, I can trace the congressional statute(s)

¹¹Each rulemaking is uniquely identified by its Regulatory Identification Number (RIN).

that the agency is effectively implementing.

In addition to the rulemaking data, I collected data on the roll call votes, if available, for each statute implemented and data on the periods of partisan control of the White House and Congress. I used the partisanship data to create indicator variables for which party controlled the House, Senate and presidency during each year of the study.¹²

3.1 Ideological Orientation of Statutes and Rules

For each rule in the dataset I estimate an *ideological orientation* that conveys information about the partisan support for the relevant statute, or statutes. Developing a measure of ideology for each rules requires first developing a measure of statute ideology and then establishing how to apply the measure of statute ideology when a rule implements multiple statutes, or a section of the Code that is comprised of multiple statutes.

3.1.1 Statute Ideology

I assume that each statute has an ideological orientation that varies with the extent to which the law was supported disproportionately by either of the two parties in Congress. Liberal statutes were passed with little support from congressional Republicans and conservative statutes were passed with little support from congressional Democrats. Statutes that were passed by unanimous consent or voice vote reflect political compromise and are coded as moderate. I calculate the ideological orientation of each statute according to the formula

$$ideology = \frac{\sum_{i \in Y} R_i}{\sum_{i \in Y, N} R_i} - \frac{\sum_{i \in Y} D_i}{\sum_{i \in Y, N} D_i}$$
(1)

which says that the ideology of a statute is equal to the proportion of Republicans R

¹²In Section D of the appendix, I provide more detail on the sources used in the empirical analysis.

who vote yea less the proportion of Democrats D who vote yea. This yields a measure of ideological orientation for each statute on the range [-1,1], where conservative statutes have positive numbers and liberal statutes have negative numbers. Statutes that were decided by unanimous consent or voice votes have a score of 0, since they theoretically contain the same fraction of Democrats and Republicans supporting the bill. A bill where all Republicans voted yea and all Democrats voted nay would have a score of 1, and the reverse would have a score of -1.

In the appendix I consider nine alternate measures of bill ideology, such as the bill locations from ideal point estimation and the party in control of Congress at the time of final passage.¹⁴ To test the validity of these candidate measures, I compared each to hand-coded measures of bill ideology from Erikson, MacKuen, and Stimson (2002) and found the measure in equation (1) (on House votes) to have the highest correlation.

3.1.2 Rule Ideology

The ideological orientation of each rule is derived from the ideology of the statutes the rule implements. If a rule implements one statute, I simply assigned the ideology of the statute to the rule. If a rule implements multiple statutes, I averaged the ideology of the statutes. If a rule cites a section of the Code, I used the ideology of the relevant statute for that section. For sections of the Code that have been statutorily amended over time, I used a weighted average to measure the relative influence of each amendment based on the number of words the amendment changed. Thus, the ideology of more influential amendments contributes more weight to the ideology of the section. I provide more detail on the procedure in Section A.1 of the appendix.

¹³Oleszek (2011) argues that voice votes are typically used when the vast majority of lawmakers are in agreement.

¹⁴See Section A.2 of the appendix.

When constructing the ideology of a rule, one concern with the method of averaging statutes together is that it assumes that a rule draws equally from each statute, which creates an obvious distortion if one statute is considerably more influential in the rulemaking than the others. In some instance, the bias could make the rule more moderate, such as the case where statute A is liberal and statute B is conservative (or vice versa) and statute A is more influential. The bias could alternately make the rule more extreme, such as when statute A is liberal and B is moderate, but B is more influential. Importantly, the noise created by averaging the statutes should not systematically bias the results in any one direction, but rather make it more difficult to find evidence of partisan implementation patterns.

However, to relax this assumption, I also make use of alternative approaches to measuring rule ideology. The most straightforward alternative is to limit my analysis to those rules that implement a single statute, in which case the rule ideology is simply the statute ideology. I also measure rule ideology by using only the most ideologically extreme statute or code section cited, as opposed to the mean. I discuss these alternative approaches further in Section 4.1.

Figure 1 shows the distribution of rule ideology for all finalized rules across the agencies and years in the study. The patterns for Democratic and Republican presidential administration provide some $prima\ facie$ evidence that the types of statutes implemented reflect the political environment, although the apparent effect sizes are modest. As the upcoming analysis will highlight, a typical effect size when comparing rulemaking across parties is about a one standard deviation shift in rule ideology. Table 1 provides the means and standard deviations for the rule ideology variable across each agency. Row one, for example, shows that the mean rule ideology for the Office of Air (EPA) is -.02 for both initiated and finalized rules. In other words, the average Office of Air rule implements a statute, or statutes, that had two percent more support from House Democrats than from House Republicans.

Rule Ideology by Agency (Finalized Rules)

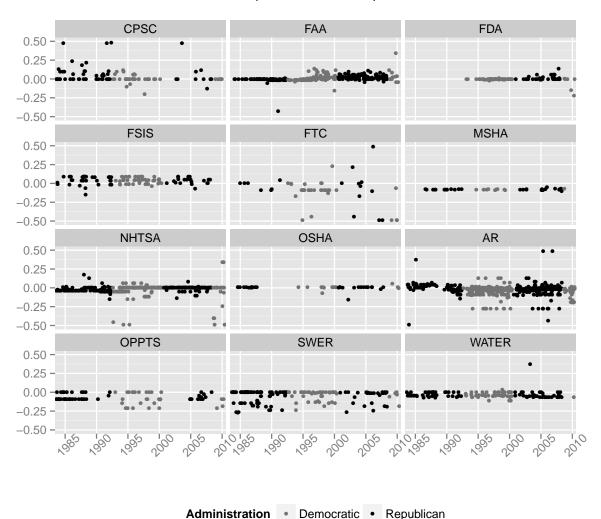


Figure 1: Panels plot the ideology of each finalized rule by year for a given agency (see Table 1 for full agency names). The points are jittered horizontally and the y-axis shows a truncated range of values from -.5 to .5 (the complete ideology range goes from -1 to 1). The few outlier rules exceeding these bounds are restrained to the nearest limit.

3.2 Social Regulatory Agencies

I focus on the rulemaking activity of 12 social regulatory agencies from 1984 to 2010. See Table 1 for the list of agencies. In general, these regulators have been both highly con-

Table 1: Summary Statistics for the Ideological Orientation of Rules by Agency

	Finali	zed Rules	Initiat	ed Rules
	mean	std. dev.	mean	std. dev.
Office of Air (AR)	-0.02	0.07	-0.02	0.07
Consumer Product Safety Commission (CPSC)	0.03	0.10	0.05	0.15
Federal Aviation Administration (FAA)	0.01	0.04	0.01	0.05
Food & Drug Administration (FDA)	0.00	0.03	-0.00	0.05
Food Safety and Inspection Service (FSIS)	0.04	0.04	0.04	0.05
Federal Trade Commission (FTC)	-0.13	0.26	-0.12	0.23
Mine Safety & Health Admin. (MSHA)	-0.08	0.01	-0.08	0.01
Nat'l Highway & Traffic Safety Admin. (NHTSA)	-0.02	0.08	-0.02	0.07
Office of Pesticides (OPPTS)	-0.07	0.06	-0.07	0.06
Occupational Safety & Health Admin. (OSHA)	0.00	0.02	0.01	0.02
Office of Sewage, Waste etc. (SWER)	-0.05	0.08	-0.04	0.08
Office of Water (WATER)	-0.03	0.04	-0.03	0.04

Note: Columns show the relevant statistic across all years in the dataset.

tentious politically and prolific rulemakers, which has created strong incentives for them to exercise inter-statutory discretion.¹⁵ These agencies are also able to draw upon a multitude of statutes, thus creating actual opportunities to use inter-statutory discretion.¹⁶

Another reason for focusing on these agencies is that social regulation, as a policy area, has divided the parties in stable and predictable ways (Harris and Milkis 1996). Republicans have traditionally favored less intrusive standards than Democrats, which reflects an enduring pattern of partisan conflict over the role of government in the economy (Poole and Rosenthal 2000). The absence of a partisan realignment in this policy area is important since I use the partisanship in voting records to establish the ideological orientation of statutes on a left-

¹⁵For example, the NHTSA and the FAA are the most prolific rule writers in the Department of Transportation, as are OSHA and MSHA, respectively, at the Department of Labor. Similarly, FSIS is one of the most active rule writers at the Department of Agriculture.

¹⁶See Table 8 in Section C.1 of the appendix for the number of statutes each agency has implemented during the period of study. The average across all agencies is 47 statutes.

right scale. Thus, when a Republican votes against the Clean Air Act of 1963 (as 94 did in the House) my assumption is that it has roughly comparable ideological implications as when a Republican votes against the Clean Air Act of 1990 (as 20 did in the House).

If there were, however, instances of partisan realignment with respect to social regulatory policies, it would be difficult to find evidence of ideological statutory implementation. For example, if liberal policies today were actually conservative policies in a prior era, then agencies operating in a liberal political environment today (e.g. unified Democratic government) may implement older "conservative" statutes and misleadingly appear to move policy in the conservative direction. Thus, any degree of partisan realignment poses serious challenges to uncovering ideological implementation patterns.

3.3 Variations in Rules: Priority and Stages

For robustness, I analyze the implementation of statutes across multiple subsets of regulations, including rules with larger estimated impacts on society, rules that were proposed (but not finalized) and rules that were finalized. I provide detail on the different subsets here.

3.3.1 Priority

In order to permit my analysis to focus on the relatively more consequential rulemakings, I code whether a rule has been categorized as *economically significant*.¹⁷ To identify these rules across all years in the data, I use data collected by the Office of Information and Regulatory Affairs on rules that have been reviewed by the office and listed as economically significant.

¹⁷Economically significant rules have an expected annual impact on society (consumers, industry etc.) of greater than 100 million USD. See President Reagan's Executive Order 12,291 and its predecessors.

3.3.2 Stages

The Unified Agenda tracks rules through all stages of the rulemaking process, from the time that agencies first publicize that they are working on a rule to the time that the final version of the rule is published. For each rule, I identified the date when the rule was formally initiated and, if the rule was ever finalized, the date of publication. The dataset contains 5,238 initiated rulemaking and 2,960 finalized rulemaking, which means that less than 60 percent of the rules that agencies initiate are actually finalized.¹⁸

4 Analysis and Results

The empirical relationship of interest is given by

$$Y_{rat} = \alpha_a + \beta_1 RepPres_t + \beta_2 RepCong_t + \beta_3 RepPres_t \times RepCong_t$$

$$+ \beta_4 DivCong_t + \epsilon_{rat}$$
(2)

where Y_{rat} is the ideological orientation for rule r promulgated by agency a in year t. The parameter α_a is an agency fixed-effect, $RepPres_t$ is an indicator variable for whether the Republicans control the presidency, $RepCong_t$ is an indicator for whether the Republicans control both chambers of Congress, $DivCong_t$ is an indicator for whether Congress has different parties controlling each chamber and ϵ_{rat} is the error term.

I present and discuss the results from estimating equation (2) as follows. I first discuss Table 2, which shows the results from estimating (2) on only finalized rules. I then discuss Table 3, which shows the results from estimating (2) on *initiated* rules, some of which were

¹⁸The ratio of initiated rules to finalized rules is relatively stable throughout the years in the dataset.

later finalized while others were abandoned by the agency. Finally, in order to highlight the asymmetric patterns of party effects, I graphically present the results from Table 2 in terms of the expected value of Y across the different configurations of partisan control.

The main results of the paper are presented in Table 2. Column 1 uses all rules and column 2 uses the subset of rules that were designated as economically significant. Columns 3 and 4 further subset the data by using only those rules that had statutory deadlines. Overall, the results suggest that agencies implement statutes that reflect the partisanship of the political environment. Republican presidents and congresses are associated with agencies regulating under more conservative statutes, and unified Democratic control is associated with agencies regulating under more liberal statutes.

Table 2 also yields important implications about how the partisan effects differ across rule types. For one, the partisan effects are larger for the economically significant rules. This is not surprising since rules with a larger policy impact—the economically significant ones—are precisely the rules that will generate the most political interest. Secondly, and perhaps more surprising, the results for rules with deadlines (columns 3 and 4) are virtually identical to the main results. This suggests that statutory deadlines may do little to disrupt the partisan timing of statutory implementation. As alluded to in earlier sections, there are a few explanations for why deadlines may be ineffectual, chief among which may be that rules with deadlines are precisely the rules that political actors are most committed to influencing.¹⁹ After all, enacting coalitions use statutory deadlines out of concern that

¹⁹Other explanations include the fact that courts have taken a deferential attitude toward agencies meeting deadlines, such as relying on a "good faith" standard when an agency claims to be constrained by resources and competing tasks (Magill 1995). Deadlines also have empirically had only a modest influence on compelling agencies into action. For example, Lazarus (1991) estimates that the EPA was only meeting 14 percent of its deadlines. Gersen and O'Connell (2007) find that rules with deadlines are not promulgated much quicker than

Table 2: Finalized Rules

				tutory ine Rules
	All	Econ.Sig.	All	Econ.Sig.
	(1)	(2)	(3)	(4)
Republican President	0.015**	0.045**	0.034*	0.067**
	(0.007)	(0.021)	(0.020)	(0.029)
Republican Congress	0.018**	0.032	0.037^{*}	0.061^*
	(0.007)	(0.022)	(0.019)	(0.036)
Divided Cong.	0.012***	0.004	0.013	0.024
	(0.004)	(0.008)	(0.018)	(0.024)
Repub. Pres. \times Repub. Cong.	-0.006	-0.032	-0.015	-0.057
	(0.009)	(0.023)	(0.023)	(0.038)
Constant	0.019	-0.035^*	-0.018	-0.056**
	(0.012)	(0.019)	(0.045)	(0.027)
Agency FE	\checkmark	\checkmark	\checkmark	\checkmark
Observations	2,960	254	460	107
R^2	0.170	0.200	0.140	0.120

Note: Standard errors clustered at the agency-year level. *p<0.1; **p<0.05; ***p<0.01

political controversy will delay implementation.

Substantively, the partisan effects in Table 2 can be as large as a standard deviation shift in the statute ideology measure. Recall that the dependent variable ranges from -1, when the statute was supported only by Democrats, to 1 for statutes supported only by Republicans. The effect sizes for Republican presidents in the models range roughly from .02 to .07 and from .02 to .06 for Republican congresses. A positive coefficient on $RepPres_t$ of .07 suggests that Republican presidents are associated with rulemaking authorized by statutes that had 7 percent more support from Republicans than Democrats during the final passage roll call.²¹ Depending on the agency, a change of .07 in the dependent variable

those without deadlines.²⁰

 $^{^{21}}$ To see this, consider a legislative body of 100 law makers that is evenly split between

corresponds to approximately a one standard deviation shift. Table 1 in the previous section shows the mean and standard deviation of the dependent variable for each of the agencies. For example, the Office of Pollution Prevention and Toxics (OPPTS) has a standard deviation of .06, the Office of Water has a standard deviation of .04 and the Office of Air has one of .07. Thus, the model suggests that party control of either chamber is associated with up to about a one standard deviation shift in the dependent variable.

Table 3: Initiated Rules

				tutory ine Rules
	All	Econ.Sig.	All	Econ.Sig.
	(1)	(2)	(3)	(4)
Republican President	0.012^{*}	0.034	0.025	0.036
	(0.006)	(0.022)	(0.017)	(0.032)
Republican Congress	0.021^{***}	0.051^{**}	0.040^{**}	0.080^{**}
	(0.006)	(0.022)	(0.016)	(0.031)
Divided Cong.	0.014^{***}	0.019^{*}	-0.001	0.037
	(0.004)	(0.011)	(0.017)	(0.027)
Repub. Pres. \times Repub. Cong.	-0.008	-0.026	-0.005	-0.019
	(0.007)	(0.023)	(0.019)	(0.038)
Constant	0.033**	-0.043**	0.005	-0.048
	(0.015)	(0.021)	(0.044)	(0.032)
Agency FE	\checkmark	\checkmark	\checkmark	\checkmark
Observations	5,238	346	703	139
\mathbb{R}^2	0.170	0.180	0.120	0.150

Note: Standard errors clustered at the agency-year level. *p<0.1; **p<0.05; ***p<0.01

I now turn to discussing Table 3, which shows the results from repeating the previous Democrats and Republicans. If two Democrats defect on a vote but all Republicans join in, the resulting score for this piece of legislation according to equation (1) would be 50/50 - 45/50 = .1, namely the percentage of support amongst Republicans minus the percentage of support amongst Democrats.

analysis on the larger set of *initiated*—but not necessarily finalized—rules. Interestingly, the presidency effect is weaker across the board for the initiated rules, whereas the Congress effect is stronger across the board. One explanation for why these branches have different effects may have to do with whether they predominately exert *ex ante* or *ex post* influence over the agency. By controlling the budget and appropriations process, Congress may have more ex ante control, which would shape the types of rules an agency proposes (the initiated rules), but may not shape the selection of rules that an agency ultimately promulgates (the finalized rules). Presidents, on the other hand, have a relatively larger ex post influence through the regulatory review process; it is difficult to imagine a major rule, e.g. an economically significant rule, evading the president's scrutiny. Ex post, Congress can do little to influence whether a proposal will be approved for promulgation by the president, save amassing a veto-proof coalition to legislate its fate.

Finally, in order to provide a better perspective on the partisan effects, I use the results from the first two columns of Table 2 to construct Figure 2. Figure 2 shows the expected value of Y under each permutation of party control.²² An important implication from Figure 2 is that unified Democratic government (labeled E[Y|x=DD] in the figure) is associated with the most liberal rulemaking activity, but as Republicans gain control of either branch of government, or all of government, they shift the orientation of implemented statutes in

²²For example, the expected value of Y during unified Republican government, which is derived by adding the individual effects of Republican president $RepPres_t$ and Republican Congress $RepCong_t$ to the interaction term $RepPres_t \times RepCong_t$ and the overall intercept (an mean of α_a). Simulation was used to estimate 95-percent confidence intervals for each expected value of Y. See King, Tomz, and Wittenberg (2000) for details on the procedure. Note that there is no case in the data of divided Congress with a Democratic president. Thus, the coefficient on $DivCong_t$ can be interpreted as the effect of a Republican president when Congress is divided.

Ideological Orientation of Implemented Statutes

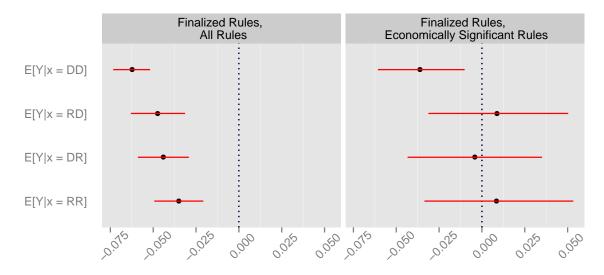


Figure 2: Each box shows the expected value of ideological orientation (with 95-percent confidence intervals) for different subsets of the data. Partisan control of government is denoted as follows: DD (unified Democratic control), RR (unified Republican control), RD (Republican president with Democratic Congress) and DR (Democratic president with Republican Congress).

the conservative (rightward) direction at roughly similar magnitudes. This effect is most pronounced for the more consequential economically significant rules, shown in the right-hand panel, and suggests that Democrats need *unified* control of government to shift policy in the liberal direction. I return to this finding in Section 5 and provide a theoretical foundation for understanding these results, and more generally why the party with a low demand for regulatory change (the Republicans) can be at an advantage.

4.1 Robustness

An alternative mechanism that could explain the results in Table 2 is that new statutes tend to quickly generate a flurry of regulatory activity, in which case the ideological orientation of rulemaking in a given period really reflects a prior (but recent) political environment. If this were true, what appears to be contemporaneous political control in Table 2 would be attributable to legislation passed in recent years, likely under a similar partisan coalition. In order to check that the political variables are indeed capturing contemporaneous control and are not just correlated with recent coalitions that may have passed legislation requiring rulemaking, I re-ran the models above using lagged variables of partisan control. I estimated

$$Y_{rat} = \alpha_b + \beta_1 Rep Pres_{t-1} + \beta_2 Rep Cong_{t-1} + \beta_3 Rep Pres_{t-1} \times Rep Cong_{t-1}$$

$$+ \beta_4 Div Cong_{t-1} + \epsilon_{rat}$$
(3)

where t-1 indicates the prior year and all the variables are as previously defined.²³ All empirical results discussed here are shown in Section B of the appendix. Table 5 shows the results from estimating (3) across each subset of the data and shows that the political effects are either statistically or substantively indistinguishable from zero, thus providing evidence that the main results in Table 2 are driven by contemporaneous control.

The results in Table 2 are also robust to changes in the way the dependent variable is measured. Table 6 repeats the analysis using only those rules that implement a single statute. While this approach has the disadvantage of reducing the number of rules in the analysis, it has the advantage of requiring no assumptions about how to code rules that implement multiple statutes or sections of the Code. Table 7 employs a different approach and repeats the main analysis using the most liberal statute or Code section cited, instead of the mean. This approach would be advantageous if ideologically extreme statutes are systematically more influential in shaping regulations. Finally, the results are robust to changing the dependent variable so that the ideology of each statute is measured using the

 $^{^{23}}$ The results are similar when lagging by two years.

mean NOMINATE score of the yea votes.²⁴

Before moving to the next section, I briefly highlight some concerns with the main results. As discussed, the measure of statute and rule ideology is imperfect and thus sensitive to measurement error: a "liberal" statute, by my measure, could be used to achieve conservative ends; policies that were once supported by conservatives may now be supported by liberals and vice versa; and the effect of averaging statute ideologies when rules cite multiple statutes could distort the ideology of the rule if the statutes are not equally influential. Since all of these concerns generate noise in the dependent variable (any given rule could appear too liberal or too conservative), under classical regression assumptions the estimates should be unbiased, but their precision should decline with smaller t-statistics and a lower R^2 (Hausman 2001).²⁵

5 Discussion of Asymmetric Partisan Effects

The empirical patterns found in this paper, both the main results in Table 2 and the alternative specifications, suggest that Republicans may be at an advantage at influencing the types of statutes agencies implement. The ideological orientation of implemented statutes shifts in the conservative direction when the Republicans control either branch of government, or all of government, but only shifts in the liberal direction when the Democrats have

²⁴Averaging NOMINATE scores of the *yea* votes correlates with the measure of bill ideology used in the main results at .95. See the appendix Section A.2 for more detail on the measure of bill ideology based on NOMINATE scores and bill locations.

²⁵Interestingly, the results for the subset of rules where no averaging across statutes is used (Table 6) have considerably larger coefficients than the main results (Table 2).

unified control. This result can be seen most clearly in the right-side panel of Figure 2.²⁶ As an aside, these findings suggest that regulators are not just responding to the threat of new legislation, as has been the focus of previous studies (Ferejohn and Shipan 1990; Shipan 2004), but also to the preferences of each branch in isolation.

In order to make sense of the asymmetric findings shown in Figure 2, I introduce a simple agenda-setting model where a Regulator can propose a policy, or rule, subject to a veto by either the Legislature or Executive.²⁷ The model clarifies why it is that the party with the lower demand for regulation (the Republican party) is at an advantage over the party with a higher demand for regulation (the Democratic party).²⁸ My objective here is not to definitively test this model of regulatory policymaking. Rather, I include the model to provide a plausible framework for interpreting the asymmetric nature of the results, which would otherwise be mysterious in the absence of any theoretical structure.

In Figure 3, I present a schematic of policy outcomes for the four possible cases of partisan alignment in the agenda-setting model. In each case, the outcome can be interpreted as the ideological orientation of the rule—or the degree of regulation it imposes on society. The model assumes that the regulatory status quo is at zero, which is likely in the case of social regulation, and that the Regulator has a sufficiently high demand for new regulation, which

²⁶This conclusion also supported by the fact that $RepPres_t$ and $RepCong_t$ are typically statistically significant in the models, but $RepPres_t \times RepCong_t$ is not.

²⁷Legislatures can effectively veto rules through the budgeting and appropriations process (Macdonald 2010), and executives can do so through regulatory review (Acs and Cameron 2013)

²⁸Table 4 in the appendix suggests that both Republicans and Democrats promulgate a similar number of rules per year. The assumption that Republicans are "low-demand" requires that Republican regulations are less intrusive, on average, than their Democratic counterparts.

is also likely given the largely liberal orientation of the agencies analyzed (Clinton and Lewis 2008).

The model shows why the high-demand party (the Democratic party) will always accept sub-optimal regulatory proposals because they are by definition an improvement over the status quo. By contrast, the low-demand party will veto sufficiently extreme proposals that the high-demand party would otherwise prefer. Thus, in three cases (A through C), the Regulator accommodates the preferences of the low-demand party and only in case D does the Regulator accommodate the preferences of the high-demand party.²⁹ The predictions match the empirical patterns in Figure 2 and provide one explanation for why the Republicans have an advantage.

6 Conclusion

This paper provides a new perspective on the relationship between congressional efforts to achieve policy goals by delegating to regulators and the reality that regulators are able to selectively time when to implement these policies. In particular, the paper draws attention to the concept of inter-statutory discretion both by developing a new dataset that tracks the implementation of statutes over time and by providing evidence that agencies exercise their discretion to implement statutes in ways that suggest a responsiveness to, or anticipation of, political intervention in the regulatory process.

Congressional scholars have long emphasized the ability of Congress to control regulators by writing statutes in such a way as to safeguard the goals of the enacting coalition.³⁰ My

²⁹The Regulator does not need to set the rule exactly at the ideal points of the relevant actors, but at least needs to make them indifferent between accepting the rule or not.

³⁰The seminal article is McCubbins, Noll, and Weingast (1987), though see Stephenson (2010) for a recent review of the literature.

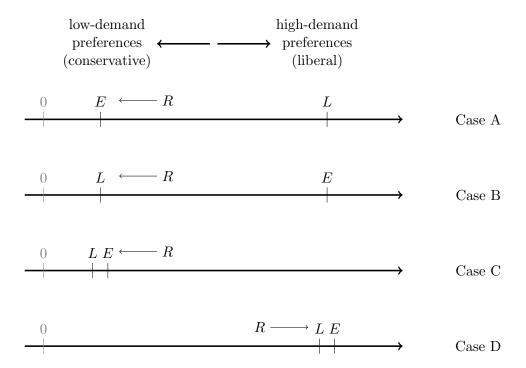


Figure 3: Predictions for how a (R)egulator would react to oversight from an ideological (E)xecutive and (L)egislature. The policy space reflects the regulatory intensity—or ideological orientation—of the rule, with the status quo at 0 and intensity increasing with rightward shifts.

findings in this paper raise concerns about this "congressional dominance" perspective in two ways. For one, I show that even if particular statutes are constraining, there is not necessarily a guarantee that they will be implemented, at least not in a timely fashion. Secondly, Congress's most fitting tool for ensuring timely implementation—the statutory deadline—appears to do little to disrupt the patterns of partisan implementation. This second finding is of course surprising since the statutory deadline is one of the so-called administrative procedures that congressional dominance scholars have pointed to as a mechanism for ensuring that enacting coalitions realize their policy goals (Bawn 1995).

From a normative standpoint, the apparent shortcomings of the congressional dominance perspective raise some concerns for policymaking in a democratic system. The primary downside is that enacting coalitions lack guarantees regarding the timely implementation of their policies. This is because the bureaucracy appears to exhibit an evolving responsiveness, whereby the current president, or Congress, ensures that the laws are implemented within a set of contemporary political constraints. Current political actors may be doing the work asked by constituents, which is an attractive proposition. However, for voters that supported Congress to pass statutes that are subsequently overlooked, the linkage between voter preferences and policy outputs is more dubious. The unfortunate conclusion for voters is that they have two hurdles to overcome. They need a legislature to enact legislation that satisfies their policy preferences and then they need politicians in office to faithfully implement that legislation.

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A Measurement Details

A.1 Measure of Ideological Orientation

In this section I outline how I measured the *ideological orientation* for sections of the Code that had been statutorily amended, i.e. sections comprised of multiple statutes.

Using data from the Office of Law Revision Counsel (OLRC) I identified all statutes that amended a given section. For each amending statute, I also counted the number of paragraphs that the amendment revised or added.³¹ I used this information to back out the total number of paragraphs π the section had when it was first created. Then, moving forward from the date when the section originated (passage of the "foundational" statute), I calculated the following weight ρ for each successive amendment:

$$\rho = \frac{\pi_{new}}{\pi_{new} + \pi_{current}} \tag{4}$$

which is the number of new or revised paragraphs π_{new} as a share of the total number of paragraphs $\pi_{new} + \pi_{current}$.³² The weight for the amending statute is then used as part of a moving average, which updates the ideology of the section S_t over time according to the formula

$$S_t = \rho \times A_t + (1 - \rho) \times S_{t-1} \tag{5}$$

where the updated ideology of a section consists of a weighted average of the existing ideology S_{t-1} and the amendment ideology A_t .

³¹Alternately I have used word counts instead of paragraphs with little change in the results.

³²A deleted paragraph counts as a revised paragraph.

A.2 Alternate Ideology Measures

In this section I discuss alternate measures of bill ideology.³³ As a way of validating the measure chosen, I look at correlations between a hand-coded measure of bill ideology and a number of automated alternatives. The measure used in the paper has the highest correlation with the hand-coded measure.

Erikson, MacKuen, and Stimson (2002) hand coded a set of public laws for whether they moved policy in a liberal or conservative direction.³⁴ I calculated a number of alternative measures as follows. I calculated two separate measures of bill ideology based on DW-NOMINATE's median lawmaker in each chamber. I also calculated a measure that averages the medians of both chambers as well as one that averages the medians along with the Common Space score for the president.³⁵ I also look at an alternative measure based on House voting records. I take the mean DW-NOMINATE score of the *yea* votes and subtract the mean DW-NOMINATE score of the chamber.³⁶ I also use the bill locations that are

³³Developing accurate measures of bill locations from the spatial model is still an on-going area of research in political science, e.g. Woon (2008). Much of the work has focused on putting bill and status quo locations on the same scale as lawmakers in order to test theories of lawmaking, such as the Party Cartel Model (Cox and McCubbins 2005). In this paper, however, I am not testing theories of lawmaking and, thus, it is not critical to develop a measure of bill ideology on the same scale as lawmakers.

³⁴The full list of bill names is available in Erikson, MacKuen, and Stimson (2002)

³⁵Many spatial models of congressional politics, such as Cox and McCubbins (2005), suggest that bills selectively move status quo policies to the floor median. The averages of the medians can be thought of as accounting for the negotiation process during bill conferences and between Congress and the president.

³⁶The reason for subtracting the chamber mean is that it helps to control for the fact that the House may have a greater number of liberal or conservative members at any given time.

extracted from NOMINATE, the mean of the bill co-sponsors and a method of using co-sponsors to estimate bill locations outlined in Woon (2008).

Table 4: Correlations Between Hand-coded Bill Ideology and Automated Measures

		correlation
	(1)	(2)
Ideology score used in paper	0.45	0.65
Mean DW-NOMINATE score of yea votes	0.47	0.62
NOMINATE bill location	-0.04	-0.10
House median	0.27	0.52
Senate median	0.43	0.58
President Common Space	0.10	0.58
Mean of House & Senate medians	0.38	-0.05
Mean of House & Senate & president	0.20	0.14
Co-sponsor utility model	*	0.02
Mean DW-NOMINATE scores for bill co-sponsors	*	0.35
N	98	38

Note: The hand-coded measure of bill liberalism is taken from Erikson, MacKuen, and Stimson (2002). Details on the *co-sponsor utility model* can be found in Woon (2008).

Column 1 of Table 4 shows the correlation between the dichotomous Erikson, MacKuen, and Stimson (2002) measure of bill ideology and all other measures. The strongest correlations are with the measure used in this paper and with the measure that averages the DW-NOMINATE scores of the *yea* votes, which correlate at .45 and .47 respectively. Somewhat surprisingly, the Senate median correlates at .43 and the House median only correlates at .27 though it is not clear why one chamber would have more "influence" than the other. The bill ideology measure used in this paper and the mean DW-NOMINATE score of the yea votes correlate at .95. The regression results in the paper are robust to either measure.

Column 2 of Table 4 shows the correlation between the Erikson, MacKuen, and Stimson (2002) measure of bill ideology, the variables from Column 1 and two additional measures of bill ideology that are based on bill co-sponsors. The co-sponsorship data is not available before the 93rd Congress, so there are fewer bills from which to calculate the correlation

coefficients. In general, the results from Column 2 suggest that the ideology measure used in the paper still has the highest correlation with the hand-coded measures from Erikson, MacKuen, and Stimson (2002).

B Robustness Results

In this section I present the three regression tables referenced in Section 4.1. Table 5 shows the results from lagging the political variables. Table 6 shows the results with only those rules that implement a single statute. Tables 7 show the results using the most liberal statute or Code section cited.

Table 5: Lagged Political Variables (Finalized Rules)

				tutory ine Rules
	All	Econ.Sig.	All	Econ.Sig.
	(1)	(2)	(3)	(4)
Republican President $_{t-1}$	-0.005	0.014	-0.005	0.013
	(0.005)	(0.013)	(0.015)	(0.021)
Republican Congress $_{t-1}$	0.009**	0.019	0.008	0.033
	(0.004)	(0.014)	(0.014)	(0.028)
Divided $Cong_{t-1}$	0.010*	-0.017	-0.002	-0.051
	(0.006)	(0.016)	(0.021)	(0.037)
Repub. $\operatorname{Pres}_{t-1} \times \operatorname{Repub.} \operatorname{Cong}_{t-1}$	0.005	-0.008	0.006	-0.013
	(0.006)	(0.017)	(0.021)	(0.033)
Constant	0.029**	-0.012	0.011	-0.025
	(0.012)	(0.012)	(0.047)	(0.022)
Agency FE	\checkmark	\checkmark	\checkmark	\checkmark
Observations	2,830	247	459	107
\mathbb{R}^2	0.160	0.170	0.120	0.093

Note: Standard errors clustered at the agency-year level. *p<0.1; **p<0.05; ***p<0.01

Table 6: Single Statute Citations Only (Finalized Rules)

				tutory ine Rules
	All	Econ.Sig.	All	Econ.Sig.
	(1)	(2)	(3)	(4)
Republican President	0.210^{*}	0.550^{*}	0.210	0.540*
	(0.120)	(0.310)	(0.160)	(0.300)
Republican Congress	0.210^{**}	0.450	0.250^{*}	0.410
	(0.095)	(0.320)	(0.140)	(0.330)
Divided Cong.	-0.071		-0.051	
	(0.100)		(0.170)	
Repub. Pres. × Repub. Cong.	-0.048	-0.520	-0.056	
	(0.120)	(0.340)	(0.200)	
Constant	-0.069	-0.490^*	-0.087	-0.960
	(0.046)	(0.290)	(0.081)	(0.610)
Agency FE	\checkmark	\checkmark	√	√
Observations	112	15	54	12
\mathbb{R}^2	0.290	0.710	0.380	0.720

Note: Standard errors clustered at the agency-year level. *p<0.1; **p<0.05; ***p<0.01

Table 7: Most Liberal Statute Cited Per Rule (Finalized Rules)

				tutory ine Rules
	All	Econ.Sig.	All	Econ.Sig.
	(1)	(2)	(3)	(4)
Republican President	0.022***	0.054**	0.040*	0.062*
	(0.008)	(0.023)	(0.021)	(0.033)
Republican Congress	0.015^{*}	0.037	0.032	0.065^{*}
	(0.008)	(0.024)	(0.020)	(0.038)
Divided Cong.	-0.003	-0.005	0.003	0.028
	(0.005)	(0.010)	(0.019)	(0.026)
Repub. Pres. \times Repub. Cong.	-0.021**	-0.048*	-0.023	-0.075^*
	(0.010)	(0.026)	(0.025)	(0.045)
Constant	0.005	-0.075^{***}	-0.035	-0.053^{*}
	(0.012)	(0.020)	(0.047)	(0.028)
Agency FE	\checkmark	\checkmark	\checkmark	√
Observations	2,960	254	461	107
\mathbb{R}^2	0.100	0.150	0.130	0.099

Note: Standard errors clustered at the agency-year level. *p<0.1; **p<0.05; ***p<0.01

C Additional Summary Statistics

C.1 Summary Statistics by Agency

The first column of Table 8 shows the number of statutes that are cited by the agency during the period of study, either directly or via a section of the Code. The second column shows the number of years that exists between the enactment of a statute and the year the statute was implemented. A time series for the counts of rules by agency can be seen in Figure 4.

Table 8: Rulemaking by Health, Safety and Environmental Regulatory Agencies

Table C. Tealemaking by Heaton, Salety and	number of	years btwn.	rule
	"influential"	statute and	production
	statutes	rulemaking	per year
Occupational Safety & Health Admin. (DOL)	26	20.0	6.2
Mine Safety & Health Admin. (DOL)	5	16.5	5.0
Food Safety and Inspection Service (AG)	29	15.9	3.5
Office of Water (EPA)	42	8.9	10.2
Office of Air (EPA)	103	8.0	32.4
Office of Pesticides (EPA)	50	11.5	9.8
Office of Sewage, Waste etc. (EPA)	67	5.7	14.9
Food & Drug Administration (HHS)	81	10.8	15.5
Nat'l Highway & Traffic Safety Admin. (DOT)	58	10.2	30.4
Federal Aviation Administration (DOT)	41	4.6	25.8
Consumer Product Safety Commission	18	15.4	8.5
Federal Trade Commission	41	11.7	2.0
mean (across agencies)	47	12	14
median (across agencies)	42	11	10

Note: If the agency is part of a larger agency, the agency is in parenthesis.

Number of Finalized Rules by Agency

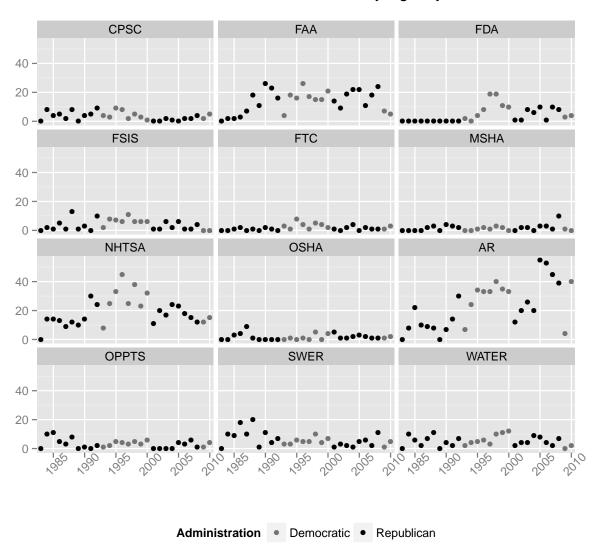


Figure 4: Counts of Finalized Rules Across each Agency and Year in the Study

C.2 EPA Statutes

In order to provide more detail on the range of statutes agencies implement and the patterns of implementation over time, I look closely at the EPA in this section. This includes: the Office of Air; the Office of Water; the Office of Pesticides and; the Office of Sewage and Waste.

Table 9 provides a snapshot of the statutes most frequently implemented by any office within the EPA by administration. The number of rules are in the *count* column. The *ideology* column shows the ideology for each relevant statute as measured by equation (1).

Table 10 shows the number of citations that the EPA's Office of Air has made to each statute, aggregated over the entire dataset from 1984 to 2010. Note that each rule can implement more than one statute, so the counts of citations in the table are greater than the number of rules initiated by the agency. All statutes that were implemented more than once by the Office of Air are included in Table 10. Table 8 noted that there were 103 statutes that the Office of Air implemented, which implies that 40 of those statutes were implemented only once since there are 63 unique statutes listed in Table 10.

Table 9: The Most Commonly Implemented EPA Statutes

Reagan		year.pass	count	ideology	text			
1 1984 114 0.00 Hazardous and Solid Waste Amendments of 1984 2 1976 80 -0.09 Toxic Substances Control Act 3 1978 71 0.00 Health Statistics and Medical Technology Act 4 1986 42 -0.14 Superfund Amendments and Reauthorization Act of 1986 5 1977 40 0.00 Safe Drinking Water Amendments Bush 41 1 1990 99 -0.08 Clean Air Act Amendments of 1990 2 1984 48 0.00 Hazardous and Solid Waste Amendments of 1984 3 1986 35 -0.14 Superfund Amendments and Reauthorization Act of 1986 4 1977 32 + 0.0 Clean Air Amendments 5 1991 30 0.00 (CAA amendment) A technical correction to PL 101-549 Clinton 1 1990 373 -0.08 Clean Air Act Amendments 3 1977 169 + 0.0 Clean Air Act Amendments 4		J 5552 P 5566	<u> </u>					
3 1978 71 0.00 Health Statistics and Medical Technology Act 4 1986 42 -0.14 Superfund Amendments and Reauthorization Act of 1986 5 1977 40 0.00 Safe Drinking Water Amendments Bush 41 1 1990 99 -0.08 Clean Air Act Amendments of 1990 2 1984 48 0.00 Hazardous and Solid Waste Amendments of 1984 3 1986 35 -0.14 Superfund Amendments and Reauthorization Act of 1986 4 1977 32 + 0.0 Clean Air Amendments and Reauthorization Act of 1986 4 1997 32 + 0.0 Clean Air Amendments and Reauthorization Act of 1986 5 1991 30 0.00 (CAA amendment) A technical correction to PL 101-549 6 1991 169 + 0.0 Clean Air Amendments 1 1991 136 0.00 (CAA amendment) A technical correction to PL 101-54 5 1987 102 -0.04 Water Quality Act of 1987 5	1	1984	114	0.00	<u> </u>			
4 1986 42 -0.14 Superfund Amendments and Reauthorization Act of 1986 5 1977 40 0.00 Safe Drinking Water Amendments Bush 41 1 1990 99 -0.08 Clean Air Act Amendments of 1990 2 1984 48 0.00 Hazardous and Solid Waste Amendments of 1984 3 1986 35 -0.14 Superfund Amendments and Reauthorization Act of 1986 4 1977 32 + 0.0 Clean Air Amendments 5 1991 30 0.00 (CAA amendment) A technical correction to PL 101-549 Clinton 1 1990 373 -0.08 Clean Air Act Amendments of 1990 2 1977 169 + 0.0 Clean Air Amendments 4 1991 136 0.00 (CAA amendment) A technical correction to PL 101-54 5 1987 102 -0.04 Water Quality Act of 1987 Bush 43 1 1990 353 -0.08 Clean Air Act Amendments <td< td=""><td>2</td><td>1976</td><td>80</td><td>-0.09</td><td>Toxic Substances Control Act</td></td<>	2	1976	80	-0.09	Toxic Substances Control Act			
4 1986 42 -0.14 Superfund Amendments and Reauthorization Act of 1986 5 1977 40 0.00 Safe Drinking Water Amendments Bush 41 1 1990 99 -0.08 Clean Air Act Amendments of 1990 2 1984 48 0.00 Hazardous and Solid Waste Amendments of 1984 3 1986 35 -0.14 Superfund Amendments and Reauthorization Act of 1984 4 1977 32 + 0.0 Clean Air Amendments 5 1991 30 0.00 (CAA amendment) A technical correction to PL 101-549 Clinton 1 1990 373 -0.08 Clean Air Amendments of 1990 2 1977 169 + 0.0 Clean Air Amendments 4 1991 136 0.00 (CAA amendment) A technical correction to PL 101-54 5 1987 102 -0.04 Water Quality Act of 1987 Bush 43 1 1990 353 -0.08 Clean Air Act Amendments 1990	3	1978	71	0.00	Health Statistics and Medical Technology Act			
Bush 41 1990	4	1986	42	-0.14	Superfund Amendments and Reauthorization Act of 1986			
1 1990 99 -0.08 Clean Air Act Amendments of 1990 2 1984 48 0.00 Hazardous and Solid Waste Amendments of 1984 3 1986 35 -0.14 Superfund Amendments and Reauthorization Act of 1986 4 1977 32 + 0.0 Clean Air Amendments 5 1991 30 0.00 (CAA amendment) A technical correction to PL 101-549 Clinton 1 1990 373 -0.08 Clean Air Act Amendments of 1990 2 1977 169 + 0.0 Clean Air Amendments 4 1991 136 0.00 (CAA amendment) A technical correction to PL 101-54 4 1991 136 0.00 (CAA amendment) A technical correction to PL 101-54 5 1987 102 -0.04 Water Quality Act of 1987 Bush 43 1 1990 353 -0.08 Clean Air Act Amendments of 1990 2 1999 271 0.00 Chemical Safety Information and Fuels Regulatory Relief	5	1977	40	0.00	Safe Drinking Water Amendments			
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1977 32 + 0.0 Clean Air Amendments	2	1984	48	0.00	Hazardous and Solid Waste Amendments of 1984			
Clinton Clinton 1 1990 373 -0.08 Clean Air Act Amendments of 1990 2 1977 169 + 0.0 Clean Air Amendments 3 1977 164 0.00 Safe Drinking Water Amendments 4 1991 136 0.00 (CAA amendment) A technical correction to PL 101-54 5 1987 102 -0.04 Water Quality Act of 1987 Bush 43 1 1990 353 -0.08 Clean Air Act Amendments of 1990 2 1999 271 0.00 Chemical Safety Information and Fuels Regulatory Relief 3 1977 179 + 0.0 Federal Reports Elimination Act of 1998 5 1977 172 0.00 Safe Drinking Water Amendments Obama 1 1990 71 -0.08 Clean Air Act Amendments of 1990 2 1999 57 0.00 Chemical Safety Information and Fuels Regulatory Relief 3 1977 48 + 0.	3	1986	35	-0.14	Superfund Amendments and Reauthorization Act of 1986			
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4 1991 136 0.00 (CAA amendment) A technical correction to PL 101-54 5 1987 102 -0.04 Water Quality Act of 1987 Bush 43 1 1990 353 -0.08 Clean Air Act Amendments of 1990 2 1999 271 0.00 Chemical Safety Information and Fuels Regulatory Relief 3 1977 179 + 0.0 Federal Reports Elimination Act of 1998 5 1977 172 0.00 Safe Drinking Water Amendments 0bama 1 1990 71 -0.08 Clean Air Act Amendments of 1990 2 1999 57 0.00 Chemical Safety Information and Fuels Regulatory Relief 3 1977 48 + 0.0 Clean Air Amendments 4 1977 45 0.00 Safe Drinking Water Amendments	2	1977	169	+ 0.0	Clean Air Amendments			
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	5	1998	44	+ 0.0	Federal Reports Elimination Act of 1998			

Table 10: Statutes Implemented by EPA Office of Air

	-	rabie 10: Sta	atutes Implemented by EPA Office of Air
	PL number	Citation count	PL name
1	101-549	681	Clean Air Act Amendments of 1990
2	95-95	675	Clean Air Amendments of 1977
3	91-604	648	Clean Air Amendments of 1970
4	95-623	306	Health Services Research, Health Statistics and Medical Technology Act
5	90-148	271	Air Quality Act of 1967
6	89-272	221	Solid Waste Disposal Act
7	102-187	200	A joint resolution to make a technical correction in Public Law 101-549.
8	95-190	180	Safe Drinking Water Amendments
9	105-362	149	Federal Reports Elimination Act of 1998
10	106-40	139	Chemical Safety Information, Site Security and Fuels Regulatory Relief Act
11	92-157	139	Comprehensive Health Manpower Training Act of 1971
12	93-319	110	Energy Supply and Environmental Coordination Act
13 14	97-23 88-206	44 41	Steel Industry Compliance Extension Act of 1981 Clean Air Act of 1963
15	96-354	14	Regulatory Flexibility Act
16	109-58	13	Energy Policy Act of 2005
17	104-59	10	National Highway System Designation Act of 1995
18	110-140	9	Advanced Geothermal Energy Research and Development Act of 2007
19	102-579	9	Waste Isolation Pilot Plant Land Withdrawal Act
20	94-280	8	A bill to authorize appropriations for the construction of certain highways
21	86-70	8	Alaska Omnibus Act
22	101-427	8	An Act to redesignate The National System of Interstate and Defense Highwa
23	93-87	8	Federal-Aid Highway Act
24	87-866	8	Federal-Aid Highway Act of 1962
25	88-423	8	Federal-Aid Highway Act of 1964
26	89-574	8	Federal-Aid Highway Act of 1966
27	90-495	8	Federal-Aid Highway Act of 1968
28	91-605	8	Federal-Aid Highway Act of 1970
29	93-643	8	Federal-Aid Highway Amendments
30	86-624	8	Hawaii Omnibus Act
31	102-240	8	Intermodal Surface Transportation Efficiency Act of 1991
32	109-59	8	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy
33	95-599	8	Surface Transportation Assistance Act
34	97 - 424	8	Surface Transportation Assistance Act of 1982
35	100-17	8	Surface Transportation and Uniform Relocation Assistance Act of 1987
36	105-178	8	Transportation Equity Act for the 21st Century
37	104-121	6	Contract with America Advancement Act of 1996
38	95-604	6	Uranium Mill Tailings Radiation Control Act
39	108-199	5	Consolidated Appropriations Act, 2004
40	93-377	3	A bill to amend the Atomic Energy Act of 1954, as amended, and the Atomic W
$\frac{41}{42}$	97-415	3 3	A bill to authorize appropriations to the Nuclear Regulatory Commission in
	91-452	3 3	Bomb Threats Act
43 44	89-675 97-90	3	Clean Air Act Amendments of 1966 Department of Energy National Security and Military Applications of Nuclear
45	94-163	3	Energy Policy and Conservation Act
46	98-616	3	Hazardous and Solid Waste Amendments of 1984
47	88-489	3	Private Ownership of Special Nuclear Materials Act
48	94-580	3	Resource Conservation and Recovery Act
49	110-244	3	SAFETEA-LU Technical Corrections Act of 2008
50	96-482	3	Solid Waste Disposal Act Amendments of 1980
51	87-456	3	Tariff Classification Act of 1962
52	96-295	2	A bill to authorize appropriations to the Nuclear Regulatory Commission in
53	100-494	2	Alternative Motor Fuels Act of 1988
54	95-91	2	Department of Energy Organization Act
55	106-377	2	Departments of Veterans Affairs and Housing and Urban Development, and Inde
56	101-54	2	Designating September 14, 1989, as National D.A.R.E. Day.
57	102-486	2	Energy Policy Act of 1992
58	104-264	2	Federal Aviation Reauthorization Act of 1996
59	102-386	2	Federal Facilities Compliance Act of 1991
60	104-106	2	National Defense Authorization Act for Fiscal Year 1996
61	100-418	2	Omnibus Trade and Competitiveness Act of 1988
62	100-551	2	Radon Program Development Act of 1987
63	104-260	2	To amend the Clean Air Act to provide that traffic signal synchronization p

D Datasets Used in Analysis

Table 11: Datasets Used in the Analysis

	Name	Description	Source
1	Unified Agenda of	A snapshot of all rulemak-	Maintained by the Reg-
	Federal Regulatory	ing activity by federal agen-	ulatory Information Ser-
	and Deregulatory	cies. It is published twice	vices Center. Available
	Activity (Unified	yearly. The counts of	online from 1995-2011 at
	Agenda)	rules (initiated and finalized	http://www.gpo.gov/fdsys/
		come from this data, as well as the source of legal au-	
		thority	
2	Economically signifi-	List of economically signif-	Available online at
	cant rules	icant rules reviewed by the	reginfo.gov
		Office of Information and	
		Regulatory Affairs	
3	United States Code		Maintained by the Office
			of Law Revision Coun-
			cil. Available online at
4	Darlatia I ama		http://uscodebeta.house.gov/
4	Public Laws		Policy Agenda Project.
			Available online at policya-
5	Roll Call Votes		gendas.org Available online at vote-
9	non Can votes		
			view.com.

Appendix References

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