

# Appendix to “Slow-Rolling, Fast-Tracking, and the Pace of Bureaucratic Decisions in Rulemaking”

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# A Description of the Data

## Collecting Data on Proposed Rules

Proposed rule data collected from the *Unified Agenda of Regulatory and Deregulatory Actions* (*UA*), a semi-annual snapshot of agency rulemaking, wherein agencies report on their regulatory activity. To compile the *UA* data, I follow the procedures outlined in O’Connell (2008). Specifically, I count each Regulatory Identification Number (RIN) as a unique identifier, even though in rare cases RINs are changed or reused. I keep the last use of the RIN, which means “that if an earlier entry for a RIN contained certain information but a later entry for that same RIN did not, that information would not be captured in the database” (O’Connell, 2008, 985). Because the *UA* sometimes contains incomplete or inaccurate information, where mistakes were obvious I corrected RIN entries by confirming information with the *Federal Register* or other agency data sources.

The analyses in the paper include several covariates measured at the bureau level. To identify which bureau wrote the rule I rely on the first four digits of the RIN. In most cases, this code indicates the bureau that sponsored the rule (e.g., the Food and Drug Administration (FDA) or the Administration for Children and Families (ACF)), although in some cases this four-digit code corresponds to an administrative unit (e.g., the Office of the Secretary within the Department of Health and Human Services (HHS)). In cases where the four-digit code identified an administrative unit, I aggregated administrative units within a department together to make stratification possible. In two instances (the Department of State and the Department of Veterans’ Affairs) the RIN indicates only the department (and not the bureau) that sponsored the rule. I was therefore unable to further disaggregate the data and, where necessary, matched the rule to covariates measured at the department level.

The results in the paper exclude several classes of rules that are oddities of the *UA* or the rulemaking process. First, I exclude rules that were transferred to a new RIN after

the rulemaking process was initiated, since it is difficult to track the trajectory of these rules (e.g., sometimes they are transferred to another agency and other times they are merged with another existing rule). Second, I exclude rules where the proposed rule was not actually a proposed rule. This consists primarily of administrative notices incorrectly marked as proposed rules. Finally, I exclude prospective actions, where the agency indicated in the *UA* that it planned to take an action, but never updated that plan with a concrete action.

Table A1: Descriptive Statistics for Variables in the Dataset

<b>Variable</b>		<b>Time varying?</b>	<b>Description</b>	<b>Mean (sd)</b>	<b>Range</b>
OIRA Time (ln)	Review	N	The logged number of days (plus one) that OIRA reviewed the proposed rule.	1.006 (1.810)	[0 -6.879]
Opp Size Unity		Y	The strength of the agency’s opposition party in Congress, based on the party’s number of seats and unity scores. See Equation 1 in the text.	1.000 (0.184)	[0.681–1.470]
Court Cases		Y	A monthly moving average of the number of DC circuit cases involving the agency in the last 12 months.	2.313 (2.607)	[0–19]
Impact		N	First principal component of PCA reflecting the scope of the rule’s influence on societal groups.	0.188 (0.106)	[0–1]
Complexity		N	Second principal component of PCA reflecting the difficulty of the rule (relative to the bureau).	0.189 (0.055)	[0–1]
Judicial Deadline		N	Dichotomous variable taking on a value of “1” if the rule had a deadline imposed by the courts.	0.037 (0.189)	[0, 1]
Statutory Deadline		N	Dichotomous variable taking on a value of “1” if the rule had a deadline imposed in statute.	0.078 (0.268)	[0, 1]
Group (ln)	Spending	Y	Logged dollar value of industry spending on political influence in the agency’s policy area in each year.	17.644 (2.100)	[8.524 -20.890]
Employment		Y	The number of employees (in thousands) in a bureau in each year.	26.643 (41.823)	[0.001–308.176]

Table A2: Bureaus and Departments Included in the Analysis

<b>Agency Name</b>	<b>Acronym</b>
Administration for Children and Families	ACF
Department of the Air Force	AF
Administration on Aging	AGING
Agency for Healthcare Research and Quality	AHRQ
Agency for International Development	AID
Agricultural Marketing Service	AMS
Animal and Plant Health Inspection Service	APHIS
Department of the Army	ARMY
Agricultural Research Service	ARS
Alcohol and Tobacco Tax Trade Bureau	ATTTB
Bureau of Alcohol, Tobacco, and Firearms (TREAS)	BATF
Bureau of Alcohol, Tobacco, Firearms, and Explosives (DOJ)	BATFE
Bureau of Economic Analysis	BEA
Bureau of Indian Affairs	BIA
Bureau of Industry and Security	BIS
Bureau of Land Management	BLM
Bureau of Ocean Energy Management	BOEM
Bureau of Prisons	BOP
Bureau of Reclamation	BOR
Bureau of the Public Debt	BPD
Bureau of Safety and Environmental Enforcement	BSEE
U.S. Customs and Border Protection	CBP
Commission on Civil Rights	CCR
Centers for Disease Control and Prevention	CDC
Community Development Institute Finance Fund	CDIF
Census Bureau	CENSUS
U.S. Coast Guard (DHS)	CG
U.S. Coast Guard (DOT)	CG
Civil Rights Division	CIVIL
Centers for Medicare & Medicaid Services	CMS
Corporation for National and Community Service	CNCS
Comptroller of the Currency	COMP
U.S. Army Corps of Engineers	CORPS
Customs Revenue Function	CRF
Defense Acquisition Regulations Council	DARC
Drug Enforcement Administration	DEA
Departmental (Homeland Security)	DEPT (DHS)
Departmental (Commerce)	DEPT (DOC)
Departmental (Defense)	DEPT (DOD)
Departmental (Energy)	DEPT (DOE)
Departmental (Interior)	DEPT (DOI)
Departmental (Labor)	DEPT (DOL)

Departmental (Transportation)	DEPT (DOT)
Departmental (Education)	DEPT (ED)
Departmental (Health & Human Services)	DEPT (HHS)
Departmental (Housing & Urban Dev)	DEPT (HUD)
Departmental (Treasury)	DEPT (TREAS)
Departmental (Agriculture)	DEPT (USDA)
Defense and Security Affairs	DSA
Employee Benefits Security Administration	EBSA
Economic Development Administration	EDA
Equal Employment Opportunity Commission	EEOC
Energy Efficiency and Renewable Energy	EERE
Executive Office for Immigration Review	EOIR
Environmental Protection Agency	EPA
Employment Standards Administration	ESA
Employment and Training Administration	ETA
Federal Aviation Administration	FAA
Farm Service Agency	FARM
Foreign Agricultural Service	FAS
Federal Bureau of Investigation	FBI
Financial Crimes Enforcement Network	FCEN
Food and Drug Administration	FDA
Federal Emergency Management Agency (DHS)	FEMA (DHS)
Federal Emergency Management Agency (Ind)	FEMA
Federal Highway Administration	FHA
Federal Housing Finance Authority	FHFA
Bureau of the Fiscal Service	FISCAL
Federal Motor Carrier Safety Administration	FMCSA
Financial Management Service	FMS
Food and Nutrition Service	FNS
Federal Railroad Administration	FRA
Forest Service	FS
Office of Federal Student Aid	FSA
Food Safety and Inspection Service	FSIS
Federal Transit Administration	FTA
U.S. Fish and Wildlife Service	FWS
Government National Mortgage Association	GNMA
Grain Inspection, Packers and Stockyards Administration	GRAIN
General Services Administration	GSA
Indian Health Service	IHS
Office of Housing	HOUSING
Health Resources and Services Administration	HRSA
U.S. Immigration and Customs Enforcement	ICE
Institute of Education Sciences	IES
Immigration and Naturalization Service	INS
Internal Revenue Service	IRS

InterNational Trade Administration	ITA
Legal Activities	LEGAL
Maritime Administration	MARI
Mine Safety and Health Administration	MSHA
National Archives and Records Administration	NARA
Department of the Navy	NAVY
National Highway Traffic Safety Administration	NHTSA
National Institute of Food and Agriculture	NIFA
National Institutes of Health	NIH
National Institute of Standards and Technology	NIST
National Nuclear Security Administration	NNSA
National Oceanic and Atmospheric Administration	NOAA
National Park Service	NPS
Natural Resources Conservation Service	NRCS
National Science Foundation	NSF
National Telecommunications and Information Administration	NTIA
Office of Assistant Secretary for Health Affairs (DOD)	OASEC
Office of Assistant Secretary for Health (HHS)	OASEC-H
Office of the American Workplace	OAW
Office of Community Planning and Development	OCPD
Office for Civil Rights (ED)	OCR (ED)
Office for Civil Rights (HHS)	OCR (HHS)
Office of English Language Acquisition	OELA
Office of Elementary and Secondary Education	OESE
Office of Federal Contract Compliance Programs	OFCCP
Office of Fair Housing and Equal Opportunity	OFHEO
Office of Government Ethics	OGE
Office of Innovation and Improvement	OII
Office of Justice Programs	OJP
Office of Labor-Management Standards	OLMS
Office of Natural Resources Revenue	ONRR
Office of Postsecondary Education	OPE
Office of Planning, Evaluation and Policy Development	OPEPD
Office of Public and Indian Housing	OPIH
Office of Personnel Management	OPM
Office of Safe and Drug-Free Schools	OSDFS
Office of Special Education and Rehabilitative Services	OSERS
Occupational Safety and Health Administration	OSHA
Office of Surface Mining Reclamation and Enforcement	OSMRE
Parole Commission	OSPC
Office of the Special Trustee for American Indians	OST
Pension Benefit Guaranty Corporation	PBGC
Pipeline and Hazardous Materials Safety Administration	PHMSA
Office of Public Health and Science	PHS
Public Health Service	PHS

Office of Policy Development and Research	POLICY
Patent and Trademark Office	PTO
Rural Business-Cooperative Service	RBCS
Rural Housing Service	RHS
Research and Innovative Technology Administration	RITA
Rural Utilities Service	RUS
Substance Abuse and Mental Health Services Administration	SAMSHA
Small Business Administration	SBA
Social Security Administration	SSA
Department of State	STATE
Technology Administration	TA
Office of Thrift Supervision	THRIFT
Transportation Security Administration	TSA
U.S. Citizenship and immigration Services	UCIS
Department of Veterans' Affairs	VA
Office of the Assistant Secretary for Veterans' Employment and Training	VETS
Wage and Hour Division	WAGE
Office of Workers' Compensation Programs	WCOMP

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*Note:* The Department of State and the Department of Veterans' Affairs do not disaggregate their rulemaking activities to the bureau level. Thus, rules from those departments are counted at the department level and not the bureau level. Additionally, each of the remaining Cabinet departments (except for the Department of Justice) has administrative units that issue rules. I group these units together into an aggregate departmental bureau.

## Mapping Interest Group Spending to Bureaus

Table A3 maps interest group spending to bureaus. The first column includes the relevant *Policy Agendas* major topic areas and codes (Baumgartner et al., 2016). Column 2 includes the Center for Responsive Politics (CRP) industries that are matched with each policy area. Note that this mapping is nearly identical to Curry’s (2015) coding. The match is not exact since I was unable to locate industry data for six “miscellaneous” categories (agriculture, business, energy, health, communication/ electronics, and transport) that he includes in Table B3 of the appendix to his book. Finally, the third column lists the bureaus that are matched to each policy area. This categorization was done based on the author’s reading of the *Policy Agendas* codebook, where many of the bureaus are specifically mentioned in the context of a particular *Policy Agendas* topic area. When the bureau was not mentioned in the codebook, the author’s best judgment was used. See Table A2 for full bureau names.

Table A3: Mapping of Bureaus to CRP Industry Spending

<b>Policy Topic</b>	<b>Agendas</b>	<b>CRP Industries</b>	<b>Bureaus</b>
Agriculture (4)		agricultural services and products; crop production & basic processing; dairy, food process and sales; forestry and forest products; livestock; poultry and eggs; tobacco	AMS, APHIS, ARS, DEPT (USDA), FAS, FNS, FS, FSA, FSIS, GRAIN, NIFA, NRCS, RBCS, RHS, RUS
Banking, finance, & domestic commerce (15)		accountants; beer, wine and liquor; building materials and equipment; business associations; business services; casinos/ gambling; chemical and related manufacturing; commercial banks; construction services; credit unions; finance/ credit companies; food and beverage; general contractors; insurance; lodging/ tourism; misc finance; misc manufacturing and distribution; miscellaneous services; real estate; recreation/ live entertainment; retail sales; savings and loans; securities and investment; special trade contractors; steel production textiles	ATTTB, BATF (TREAS), BEA, BIS, BPD, CDIF, CENSUS, COMP, CRF, DEPT (DOC), DEPT (TREAS), EDA, FCEN, FEMA (DHS), FEMA (IND), FISCAL, FMS, IRS, ITA, NIST, NOAA, NTIA, PTO, SBA, TA, THRIFT
Civil rights, minority issues & civil liberties (2)		abortion policy/ pro-abortion rights; abortion policy/anti-abortion; clergy and religious organizations; gun rights, women's issues	CCR, EEOC
Community development and housing issues (14)		home builders	DEPT (HUD), FHFA, GNMA, HOUSING, OCPD, OFHEO, OPIH, POLICY
Defense (16)		defense aerospace; defense electronics; miscellaneous defense	AF, ARMY, CBP, CG (DHS), CORPS, DARC, DEPT (DHS), DEPT (DOD), ICE, NAVY, OASEC, TSA, UCIS, VA

Education (6)	education; teachers' unions	DEPT (ED), FSA, IES, OCR (ED), OELA, OESE, OII, OPE, OPEPD, OSDFS, OSERS
Energy (8)	alternative energy production and services; electric utilities; mining, oil and gas; waste management	BSEE, DEPT (DOE), DSA, EERE, NNSA
Environment (7)	environment	EPA
Government operations (20)	civil servants/ public officials, postal unions	GSA, NARA, OFCCP, OGE, OPM
Health (3)	health professionals; health services/ HMOs; hospitals and nursing homes; pharmaceuticals/ health products	ACF, AHRQ, CDC, CMS, DEPT (HHS), FDA, IHS, HRSA, NIH, OASEC-H, OCR (HHS), PHS, SAMSHA
International affairs and foreign aid (19)	foreign and defense policy; pro-Israel; trucking	AID, STATE
Labor, employment, and immigration (5)	building trade unions; industrial unions; misc unions; postal unions; public sector unions; teachers unions; transportation unions	DEPT (DOL), EBSA, ESA, ETA, MSHA, OAW, OLMS, OSHA, PBGC, VETS, WAGE, WCOMP
Law, crime and family issues (12)	gun control	BATFE (DOJ), BOP, CIVIL, DEA, EOIR, FBI, INS, LEGAL, OJP, OSPC
Public Lands and Water Management (21)	forestry and forest products	BLM, BOEM, BOR, DEPT (DOI), FWS, NPS, ONRR, OSMRE, OST
Science, space, technology, and communications (17)	electronics manufacturing and equipment; internet; printing and publishing; telecom services & equipment; telephone; utilities; tv/ music/ movies	NSF
Social welfare (13)	human rights; retired	AGING, CNCS, SSA

Transportation (10)	air transport; automotive; railroads; sea transport; transportation unions; trucking	CG (DOT), DEPT (DOT), FAA, FHA, FMCSA, FRA, FTA, MARI, NHTSA, PHMSA, RITA
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## B Principal Components Analysis

PCA is a widely used technique to reduce a set of variables into a smaller number of uncorrelated latent dimensions. In the paper, PCA is used to uncover an *Impact* and *Complexity* score for each rule in the dataset. PCA is typically applied to continuous data; because I include several discrete data points, I employ the polychoric PCA approach developed by Kolenikov and Angeles (2009).<sup>1</sup>

The information underlying this analysis is presented in Table B1 below, which provides a description of each of the six input variables and their associated data sources. The data are drawn from the *Unified Agenda* and from *LexisNexis* searches. Since bureaus may have very different writing styles, I scale the two variables that are based on how the rule is drafted—*Statutory authorities* and *Rule abstract*—to the mean for the issuing bureau.

In conducting PCA, the researcher must evaluate how many dimensions are present in the data. The convention is to discard any component with an eigenvalue less than one (Jolliffe, 2002). As shown in Table B1, both *Impact* and *Complexity* have eigenvalues greater than one.<sup>2</sup> Together these two dimensions address 48.2% of the underlying variance in the data, suggesting they do a good job of capturing the latent concepts.

Table B1 also reports the component loadings for each of the data points. As expected, each of the input variables loads positively and meaningfully onto the relative dimensions.

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<sup>1</sup>The polychoric PCA approach does not vary meaningfully from a standard PCA model in this case; the correlation between the two approaches is quite high ( $\rho > .95$  for both dimensions).

<sup>2</sup>Visual inspection of a screeplot also confirms the presence of two dimensions.

Table B1: PCA Input Data and Component Loadings

	Variable Description	Loading
<b>Rule Impact</b>		
<i>Eigenvalue = 1.865</i>		
<i>Variance explained = 0.311</i>		
Economically significant	1 if rule is expected to have annual impact of \$100 million or more, 0 otherwise (Source: Unified Agenda)	1.232
Small business	1 if rule affected small business or other entities, 0 otherwise (Source: Unified Agenda)	0.361
Governmental entities	1 if rule affects state, local or tribal governments, 0 otherwise (Source: Unified Agenda)	0.420
Newspaper mention	1 if <i>New York Times</i> covered the proposed rule's release, 0 otherwise (Source: Lexis-Nexis)	1.330
<hr/>		
<b>Rule Complexity</b>		
<i>Eigenvalue = 1.02</i>		
<i>Variance explained = 0.171</i>		
Statutory authorities	The number of statutory cites for the rule minus the mean number of statutory cites for the bureau issuing the rule (Source: Unified Agenda)	0.788
Rule abstract	The number of words in the rule's abstract minus the mean number of words for abstracts written by the bureau issuing the rule (Source: Unified Agenda)	0.524

## C Alternative Empirical Specifications

### Alternate Clock Times

The models in the text report delay in rulemaking as measured from the time the proposed rule is published in the *Federal Register* to the time that the agency completes work on the draft final rule (i.e., when OIRA received the draft final rule (for final rules that OIRA selected for review) or when the final rule was published in the *Federal Register* (for rules that OIRA declines to review)). This operationalization of time to completion has many advantages: by starting the clock at the same point for each rule, I can standardize across a large number of rulemaking agencies. Additionally, by stopping the clock when the agency is done (and not when OIRA is done), I am able to capture the *agency's* strategic action. However, there are two concerns with this approach, which I deal with empirically in Tables C1 and C2 below.

First, one might be concerned that by starting the clock at the proposed rule publication, an important piece of the rulemaking process—the drafting of the proposed rule—is omitted from the time calculation. As indicated in the text, this is a necessary sin, since we cannot systematically observe when agencies begin drafting proposed rules. More importantly, this biases against the paper's argument; if agencies are systematically delaying the face of political opposition, they are more likely to do so earlier in the process (when delay is harder for outsiders to observe) rather than later (when delay is more readily observed).

Nonetheless, in Table C1 I look at a subset of rules where I am able to systematically start the clock earlier in the process. Following the approach of Yackee and Yackee (2010), I look at rules where the agency published a “pre-rule” before the proposed rule (otherwise known as an Advanced Notice of Proposed Rulemaking, or ANPRM). Only a small fraction of the rules in the *UA* report having an associated ANPRM.<sup>3</sup> For the 383 rules that had

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<sup>3</sup>This is surely an undercount of ANPRMs, as agencies appear to be somewhat lax in reporting these actions.

an ANPRM issued after the start of the dataset in 1995, I rerun the models and show that, as expected the results for the president and the courts show a negative and (largely) statistically significant effect. The results for Congress are not as expected, but, as discussed in the text of the paper, agencies may have better information about congressional disposition for rules that are substantively important, making this measure less stable for such rules (and rules with an ANPRM certainly fit into this category). This is a hard test of the theory, yet the results still provide somewhat limited support for the argument that agencies move slower in the face of political opposition.

Second, one might be concerned that stopping the clock when the agency is done makes it harder to compare the findings in this paper with previous work that stops the clock at the final rule's *Federal Register* publication (e.g., Gersen and O'Connell, 2008; Yackee and Yackee, 2010). Table C2 does just this: starting the clock at the proposed rule's *Federal Register* publication and stopping at the final rule's *Federal Register* publication. The results with respect to the congressional and judicial variables are negative and statistically significant, as expected.

It is worth noting that operationalizing the data in this way results in a violation of the proportional hazards assumption for the presidential variable: *OIRA Review Time* ( $\ln$ ). To address this, I interact the offending variables with a measure of time ( $Time^2$ ) (see Box-Steffensmeier and Jones, 2004; Licht, 2011).<sup>4</sup> Substantively, this suggests that while OIRA's review time initially slows the rate of finalization, after a significant period of time (5.9 years, likely when a new administration is in office), this effect no longer is important.

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<sup>4</sup>Interpreting the effects of this time-dependent variable is a special case of multiplicative interaction. The negative and statistically significant constituent term indicates that in the first month after issuance of the proposed rule, an incremental increase in the value of a rule's *OIRA Review Time* score decreases the hazard of finalization. The sign for the interaction term takes an opposing (positive) sign, meaning that the direction of the effect changes over time. Since the size of the interaction coefficient is small relative to the constituent coefficient, this change is slow to occur (Licht, 2011). Indeed, only after the rule remains unfinalized for many years does the length of OIRA's review of the proposed rule essentially make no difference in the hazard of a rule being finalized; the inflection point for the sign change of the effect (for Model 12) is estimated by calculating  $\sqrt{\frac{0.060}{1.19e-05}} = 71.0$  months (or 5.9 years) (see Box-Steffensmeier and Zorn, 1998, 17).

In sum, using this alternate clock time also yields substantively similar results with respect to OIRA review to those reported in the paper.

Table C1: Cox Model with Alternate Clock Time: ANPRM Publication to Final Rule Issuance

	ANPRM rules (9)	ANPRM rules (10)
OIRA Review Time (ln)	-0.089* (0.036)	-0.094* (0.043)
Opp Size Unity	0.377 (0.372)	0.333 (0.394)
Court Cases	-0.037 (0.040)	-0.035 (0.041)
Impact		-0.444 (0.535)
Complexity		-0.937 (1.320)
Judicial Deadline		0.450 (0.417)
Statutory Deadline		0.098 (0.232)
Group Spending		-0.151 (0.401)
Employment		-0.051 (0.040)
President Fixed Effects	✓	✓
Bureau Stratification	✓	✓
Num events	383	383
Num obs.	14,252	14,252
PH test	0.99	0.96

*Note:* Clock begins when the Advance Notice of Proposed Rulemaking (ANPRM) is published in the *Federal Register* and ends when the agency submits the draft final rule to OIRA or publishes it in the *Federal Register*. Statistical significance: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

Table C2: Cox Model with Alternate Clock Time: Proposed Rule Publication to Final Rule Publication

	All Rules (11)	All Rules (12)	High Impact Rules (13)	Very High Impact Rules (14)
OIRA Review Time (ln)	-0.063*** (0.006)	-0.060*** (0.007)	-0.059*** (0.012)	-0.064*** (0.018)
OIRA Review Time (ln) × Time <sup>2</sup>	1.18e-05** (4.21e-06)	1.19e-05** (4.20e-06)	9.43e-06 (5.99e-06)	
Opp Size Unity	-0.168** (0.058)	-0.172** (0.059)	-0.175 (0.116)	0.061 (0.184)
Court Cases	-0.012 <sup>+</sup> (0.006)	-0.010 (0.006)	-0.007 (0.012)	-0.017 (0.020)
Impact		-0.590*** (0.114)	0.738*** (0.218)	1.140*** (0.312)
Complexity		-0.420* (0.199)	0.234 (0.301)	-0.061 (0.520)
Judicial Deadline		0.200*** (0.050)	0.221** (0.077)	0.137 (0.111)
Statutory Deadline		0.122*** (0.033)	0.053 (0.059)	0.091 (0.085)
Group Spending		-0.027 (0.033)	-0.045 (0.077)	-0.096 (0.135)
Employment		0.0002 (0.001)	-0.004 (0.003)	-0.014 <sup>+</sup> (0.009)
President Fixed Effects	✓	✓	✓	✓
Bureau Stratification	✓	✓	✓	✓
Num events	11,022	11,022	2,750	1,097
Num obs.	214,482	214,482	56,382	22,438
PH test	—	—	—	0.91

*Note:* Clock begins when the proposed rule is published in the *Federal Register* and ends when the agency publishes the final rule in the *Federal Register*. Statistical significance: <sup>+</sup> $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

## Alternate Measures of Presidential Conflict

Table C3 below replicates the main results from Table 1 using an alternate measure of the agency’s relationship with the president (Models 15 and 16). *Unaligned President* reflects the case where the president and the agency do not share an ideological affinity. It is a dummy variable coded “1” when the agency is liberal (conservative) according to Clinton and Lewis’s (2008) measure of agency ideology and the president is a Republican (Democrat), and “0” otherwise. The results are unaffected by using this measure of conflict with the president in lieu of *OIRA Review Time*.

Additionally, in a recent article, Bolton, Potter and Thrower (2016) argue that both ideological disagreement *and* OIRA’s capacity affect the amount of time OIRA spends reviewing rules. While capacity is the emphasis of their argument, they find consistent support for the effect of ideological conflict with the president on the duration of OIRA reviews, an argument supported by other research (Balla, Deets and Maltzman, 2011; Ellig and Fike, 2013; Heinzerling, 2014; McLaughlin, 2011). The implication of Bolton et al.’s argument for the present analysis, however, is that there is measurement error associated with this variable, leading the coefficient for this variable to be biased toward zero.

To demonstrate that this measurement error is no way driving the results, I reran the models including the two primary measures of capacity from Bolton et al.’s paper: vacancies in the OIRA Administrator position in a given month and the number of employees (FTEs) in OIRA in a year.<sup>5</sup> The results, shown in Models 17 and 18 in Table C3, are substantively unchanged with the inclusion of these variables, which alleviates concerns about possible spuriousness.

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<sup>5</sup>Bolton et al. include a third measure—*Workload*, a count of the number of rules concurrently under OIRA review. I exclude this variable since it speaks to the agency side of production and not to OIRA’s capacity specifically.

Table C3: Robustness Checks for Presidential Conflict Measure

	All rules (15)	All rules (16)	All rules (17)	All rules (18)
Unaligned President	-0.067*** (0.020)	-0.065** (0.020)		
OIRA Review Time (ln)			-0.032*** (0.006)	-0.030*** (0.006)
Opp Size Unity	-0.216*** (0.056)	-0.195*** (0.056)	-0.155** (0.058)	-0.157** (0.059)
Court Cases	-0.014* (0.006)	-0.014* (0.006)	-0.015* (0.006)	-0.013* (0.006)
Impact		-0.538*** (0.112)		-0.449*** (0.114)
Complexity		-0.338 (0.197)		-0.362 (0.198)
Judicial Deadline		0.187*** (0.050)		0.196*** (0.051)
Statutory Deadline		0.121*** (0.033)		0.127*** (0.033)
Group Spending		-0.012 (0.024)		-0.016 (0.033)
Employment		-0.001 (0.001)		-0.001 (0.001)
OIRA Vacancy <sup>b</sup>			-0.069** (0.025)	-0.071** (0.025)
OIRA FTE <sup>b</sup>			0.003 (0.003)	0.002 (0.004)
President Fixed Effects			✓	✓
Bureau Stratification	✓	✓	✓	✓
Num events	11,022	11,022	11,022	11,022
Num obs.	205,160	205,160	205,160	205,160
PH test	0.49	0.59	0.26	0.27

*Note:* Model entries are coefficients obtained from proportional Cox models stratified by agency. Robust standard errors clustered on the rule are in parentheses.

*a:* *Unaligned President* is a dummy variable coded “1” when the agency is liberal (conservative) according to Clinton and Lewis’s measure and the president is a Republican (Democrat), and “0” otherwise.

*b:* See Bolton, Potter and Thrower (2016) for discussion of the coding of the *OIRA Vacancy* and *OIRA FTE* variables.

## Alternate Measures of Congressional Opposition

Table C4 includes two alternate measures of congressional conflict with agencies, in lieu of *Opp Size Unity*. The first, *Unaligned Congress*, is a dummy variable that takes on a value of “1” if the agency is conservative (liberal) and either chamber is controlled by Democrats (Republicans), and “0” otherwise (using Clinton and Lewis’s measures of agency ideology). This straightforward measure captures partisan control of the chamber. Since floor and committee control is necessary to impose costly oversight, impose limitation riders, and advance a disapproval resolution, this measure allows us to see whether shared partisanship affects Congress’s ability to impose sanctions on an agency.

The results with *Unaligned Congress* are shown in Models 19 and 20 in Table C4. Because this variable is nonproportional, I interact it with a function of time to correct the violation of the proportional hazards assumption (see Box-Steffensmeier and Jones, 2004; Licht, 2011). The opposing signs for the constituent and the interaction term suggest that the direction of the effect changes over time; initially it is negative (as predicted), but eventually it becomes positive. Since the size of the interaction coefficient is small relative to the constituent coefficient, this change is slow to occur (Licht, 2011). Indeed, only after the rule remains unfinalized for many years (5.2 years) does congressional opposition to the proposed rule no longer slow the hazard of a rule being finalized.<sup>6</sup> Since most rules are finalized well before this, the substantive interpretation of this remains the same: congressional opposition serves to reduce the likelihood of an agency finalizing a proposed rule.

Columns 3 and 4 of Table C4 show the results with a second measure, *Opposition Seat Share*. This is the proportion of seats held by the Republicans (Democrats) if the agency is liberal (conservative) (averaged across the House and the Senate). The results are substantively unaffected using this alternate measure.

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<sup>6</sup>The inflection point for the sign change of the effect (for Model 20) is estimated by calculating  $\sqrt{\frac{0.158}{4.01e-05}}$  = 62.8 months (or 5.2 years) (see Box-Steffensmeier and Zorn, 1998, 17).

Table C4: Robustness Checks for Congressional Opposition Measure

	All rules (19)	All rules (20)	All rules (21)	All rules (22)
OIRA Review Time (ln)	-0.033*** (0.006)	-0.032*** (0.006)	-0.032*** (0.006)	-0.030*** (0.006)
Unaligned Congress <sup>a</sup>	-0.160*** (0.026)	-0.158*** (0.026)		
Unaligned Congress × Time <sup>2</sup>	4.14e-05* (1.79e-05)	4.01e-05* (1.81e-05)		
Opposition Seat Share <sup>b</sup>			-0.891** (0.302)	-0.903** (0.304)
Court Cases		-0.011 (0.006)	-0.014* (0.006)	-0.013* (0.006)
Impact		-0.435*** (0.114)		-0.453*** (0.114)
Complexity		-0.342 (0.198)		-0.360 (0.197)
Judicial Deadline		0.204*** (0.051)		0.197*** (0.050)
Statutory Deadline		0.122*** (0.033)		0.128*** (0.033)
Group Spending		-0.026 (0.033)		-0.018 (0.033)
Employment		-0.001 (0.001)		-0.001 (0.001)
President Fixed Effects	✓	✓	✓	✓
Bureau Stratification	✓	✓	✓	✓
Num events	11,022	11,022	11,022	11,022
Num obs.	205,160	205,160	205,160	205,160
PH test	–	–	0.16	0.23

*Note:* Model entries are coefficients obtained from proportional Cox models stratified by bureau. Robust standard errors clustered on the rule are in parentheses.

*a:* *Unaligned Congress* is a dummy variable that takes on a value of “1” if the agency is conservative (liberal) and either chamber is controlled by Democrats (Republicans), and “0” otherwise.

*b:* *Opposition Seat Share* is the proportion of seats held by the Republicans (Democrats) if the agency is liberal (conservative), averaged across the House and the Senate.

## Robustness Checks for Moderate Agencies

In the text, the *Opp Size Unity* measure relies on Clinton and Lewis's (2008) point estimates of agency ideology to distinguish liberal and conservative agencies. This is an admittedly crude approach, since it ignores uncertainty in the estimates of agency ideology. However, I performed two robustness checks to ensure this decision does not bias the results in any way. First, I reran the models excluding "moderate" agencies (i.e., those for which the Clinton-Lewis Bayesian credibility interval overlapped with zero). The results are substantively unchanged by limiting the data series in this way. See Models 23 and 24 in Table C5. Second, I considered what it might mean for an agency to be truly "moderate." A moderate agency is not better aligned with one party or the other, and should not expect to be sanctioned more by one party than the other. Nevertheless, moderate agencies are still subject to congressional scrutiny. Following this logic, moderate agencies may be most concerned with the ability of the majority party (regardless of its partisan orientation) to offer up sanctions. Therefore, I reran the models substituting the strength of the majority party for the *Opp Size Unity* measure for moderate agencies only. That is, I followed Equation 1 in the paper for conservative and liberal agencies, but for moderate agencies I substituted in the strength of the majority party (rather than the opposition party). Again, the results are consistent with this modification; see Models 25 and 26 in Table C5.

Table C5: Robustness Checks for Moderate Agencies

	All (excluding moderate agencies) (23)	All (excluding moderate agencies) (24)	All rules (25)	All rules (26)
OIRA Review Time (ln)	-0.022** (0.008)	-0.023** (0.008)	-0.031*** (0.006)	-0.030*** (0.006)
Opp Size Unity	-0.261*** (0.067)	-0.263*** (0.068)		
Opp Size Unity (Modified) <sup>a</sup>			-0.141* (0.063)	-0.141* (0.064)
Court Cases	-0.009 (0.007)	-0.008 (0.007)	-0.015* (0.006)	-0.013* (0.006)
Impact		-0.273* (0.123)		-0.456*** (0.114)
Complexity		-0.287 (0.232)		-0.355 (0.197)
Judicial Deadline		0.179*** (0.051)		0.196*** (0.050)
Statutory Deadline		0.131*** (0.036)		0.127*** (0.033)
Group Spending		-0.060 (0.034)		-0.017 (0.033)
Employment		-0.008*** (0.002)		-0.001 (0.001)
President Fixed Effects	✓	✓	✓	✓
Bureau Stratification	✓	✓	✓	✓
Num events	8,165	8,165	11,022	11,022
Num obs.	155,168	155,168	205,160	205,160
PH test	0.35	0.57	0.15	0.22

*Note:* Model entries are coefficients obtained from proportional Cox models stratified by bureau. Robust standard errors clustered on the rule are in parentheses.

*a:* This variable follows the coding of *Opp Size Unity* described in the manuscript, but uses the strength of the majority party for moderate agencies (i.e., those agencies for which the Clinton-Lewis score's credibility interval includes zero).

## Alternate Measures of Judicial Conflict

Table C6 shows the results from Table 1 using two alternate measure for the courts variable, *Court Cases*. First, *Opposition Judges* is based on the ideology of reviewing judges. It is the proportion of judges on the DC Circuit in a given year who do not share the agency's ideological orientation (i.e., the proportion Republican-appointed judges for a liberal agency, and the proportion Democrat-appointed judges for a conservative agency). The results using this variable are shown in Models 27 and 28 and, as expected, are negative, suggesting that as the proportion of opposition judges increases, agencies are less likely to finalize a proposed rule.

Second, *Cases Lost* is a 12-month moving average of the number of cases the department lost in the DC circuit court (see Models 29 and 30). Although this variable does not achieve traditional levels of statistical significance, it carries the expected negative sign. As both of these measures are fairly slow-moving (e.g., *Opposition Judges* does not change between 1999 and 2002), I do not include time (i.e., presidential administration) fixed effects in these models. Additionally, the results for *Cases Lost* should be interpreted with caution, since there is a “dual mechanism” zero: zeroes can indicate either no cases heard or no cases lost. Nonetheless, these alternate measures cut in the same direction as the argument in the paper and offer some support (albeit weak) for the argument.

Table C6: Robustness Checks for Courts Measure

	All rules (27)	All rules (28)	All rules (29)	All rules (30)
OIRA Review Time (ln)	-0.031*** (0.006)	-0.029*** (0.006)	-0.031*** (0.006)	-0.029*** (0.006)
Opp Size Unity	-0.254*** (0.063)	-0.234*** (0.064)	-0.187*** (0.055)	-0.167** (0.055)
Opposition Judges <sup>a</sup>	-0.421* (0.196)	-0.416* (0.197)		
Cases Lost <sup>b</sup>			-0.006 (0.013)	-0.005 (0.013)
Impact		-0.468*** (0.114)		-0.463*** (0.114)
Complexity		-0.354 (0.198)		-0.360 (0.198)
Judicial Deadline		0.196*** (0.050)		0.200*** (0.050)
Statutory Deadline		0.130*** (0.033)		0.127*** (0.033)
Group Spending		-0.005 (0.024)		-0.008 (0.024)
Employment		-0.001 (0.001)		-0.001 (0.001)
Bureau Stratification	✓	✓	✓	✓
Num events	11,022	11,022	11,022	11,022
Num obs.	205,160	205,160	205,160	205,160
PH test	0.10	0.27	0.16	0.31

*Note:* Model entries are coefficients obtained from proportional Cox models stratified by agency. Robust standard errors clustered on the rule are in parentheses. Because these measures are slow-moving, I exclude presidential administration fixed effects.

*a:* *Opposition Judges* is the proportion of judges on the DC Circuit in a year who were appointed by a Republican (Democratic) president for liberal (conservative) agencies.

*b:* *Cases Lost* is a monthly moving average of the number of cases the agency lost in the previous 12 months.

## Analyses Considering the Impact of Deadlines

Rules with a statutory or judicial deadline may be subject to different political influences than those without. Indeed, one might be concerned that deadlines may become more or less likely given characteristics of Congress and the courts, and that this may in turn affect the agency’s pacing. To address this concern, I took several empirical approaches.

First, I reran the analysis while excluding any rule that had an associated deadline (Table C7, Models 31 and 32), on the logic that the presence of deadlines themselves may affect the analysis. Second, as Gersen and O’Connell (2008) note, deadlines are primarily a tool used to control the rulemaking activity of just a handful of agencies. This minority receives the lion’s share of deadlines, and other agencies rarely experience a deadline at all. Thus, in Table C7 (Models 33 and 34), I drop the top five agencies that are most frequently targeted by deadlines from the analysis. This includes the Environmental Protection Agency, the Department of Commerce, the Department of the Interior, the Department of Health and Human Services, and the Department of Transportation. Dropping this set of agencies captures the “dog that didn’t bark” (i.e., potential deadlines), accounting for over 82% of the deadlines in the analysis.

Lastly, Gersen and O’Connell (2008) argue that Congress uses deadlines primarily to guard against coalition drift. In a recent working paper, MacDonald and McGrath (2016) build on this argument, showing that statutory deadlines are more commonly employed by unified rather than divided governments. They also find that agencies respond to unified deadlines by issuing rules more quickly than they do in response to deadlines instituted by divided governments. That is, the makeup of particular congresses likely impacts both the probability of a deadline and the way in which agencies respond to it. Indeed, it is very likely that there are other plausible arguments that could be constructed to link aspects of congressional composition to deadline behavior. In response, I include an additional robustness check with congress fixed effects; see Table C8 below.

Overall, the consistency of these findings suggests that the core results that I report are not substantially biased by this potential source of endogeneity.

Table C7: Analysis Excluding Rules With A Deadline

	Excluding deadline rules <sup>a</sup> (31)	Excluding deadline rules (32)	Excluding top players <sup>b</sup> (33)	Excluding top players (34)
OIRA Review Time (ln)	-0.034*** (0.007)	-0.029*** (0.007)	-0.022* (0.009)	-0.017 (0.009)
Opp Size Unity	-0.115* (0.063)	-0.122* (0.063)	-0.196* (0.084)	-0.195* (0.085)
Court Cases	-0.018* (0.007)	-0.016* (0.007)	-0.013 (0.013)	-0.011 (0.013)
Impact		-0.649*** (0.136)		-0.767*** (0.182)
Complexity		-0.239 (0.212)		-0.117 (0.289)
Group Spending		-0.039 (0.035)		-0.019 (0.038)
Employment		-0.001 (0.001)		-0.001 (0.001)
President Fixed Effects	✓	✓	✓	✓
Bureau Stratification	✓	✓	✓	✓
Num events	9,507	9,507	5,496	5,496
Num obs.	182,184	182,184	113,385	113,385
PH test	0.22	0.34	0.59	0.70

*Note:* Model entries are coefficients obtained from proportional Cox models stratified by agency. Robust standard errors clustered on the rule are in parentheses.

*a:* Analysis excludes any rule that had a statutory or judicial deadline at the final rule stage.

*b:* Analysis excludes rules from departments that have a relatively high share of deadlines, including the Environmental Protection Agency, the Department of Commerce, the Department of the Interior, the Department of Health and Human Services, and the Department of Transportation.

Table C8: Analysis Including Congress Fixed Effects

	All rules (35)	All rules (36)	High Impact rules (37)	Very High Impact rules (38)
OIRA Review Time (ln)	-0.036*** (0.006)	-0.035*** (0.006)	-0.030* (0.007)	-0.046** (0.018)
OIRA Review Time (ln) × Time <sup>2</sup>	3.40e-06 (4.76e-06)	3.71e-06 (4.76e-06)		
Opp Size Unity	-0.242*** (0.069)	-0.242*** (0.069)	-0.104 (0.129)	-0.026 (0.187)
Opp Size Unity × Time <sup>2</sup>	0.0002 (0.0003)	0.0002 (0.0003)		
Court Cases	-0.015* (0.006)	-0.014* (0.006)	-0.008 (0.012)	-0.035+ (0.020)
Impact		-0.431*** (0.115)	0.701** (0.217)	1.085*** (0.311)
Complexity		-0.389* (0.197)	0.299 (0.296)	-0.194 (0.520)
Judicial Deadline		0.204*** (0.051)	0.208** (0.075)	0.051 (0.110)
Statutory Deadline		0.131*** (0.033)	0.039 (0.058)	0.060 (0.085)
Group Spending		-0.008 (0.034)	-0.026 (0.078)	0.048 (0.149)
Employment		-0.001 (0.001)	-0.003 (0.003)	-0.016+ (0.009)
Congress Fixed Effects	✓	✓	✓	✓
Bureau Stratification	✓	✓	✓	✓
Num events	11,022	11,022	2,750	1,097
Num obs.	205,160	205,160	52,540	20,385
PH test	–	–	0.86	0.99

*Note:* Model entries are coefficients obtained from proportional Cox models stratified by agency. Robust standard errors clustered on the rule are in parentheses. Models replicate Table 1 with congress fixed effects in lieu of presidential administration fixed effects. Time interactions included in Models 35 and 36 to address nonproportionality in the hazards.

## Analysis Including Year Fixed Effects

The models included in the manuscript include presidential administration fixed effects. In Table C9 I reestimate Table 1 from the paper using year fixed effects in lieu of administration fixed effects. The results are consistent with the main models in the paper, but the effects are somewhat muted. Specifically, *Court Cases*—a monthly moving average reflecting the last 12 months—is still negatively signed, but no longer achieves statistical significance. This is unsurprising since this is a slow-moving variable; the inclusion of fixed effects is known to be taxing to data with little within-unit variation, resulting in inefficiency (including higher standard errors) and unreliable point estimates (Plümper and Troeger, 2007).

Table C9: Analysis Including Year Fixed Effects

	All rules (39)	All rules (40)	High Impact rules (41)	Very High Impact rules (42)
OIRA Review Time (ln)	-0.035*** (0.006)	-0.033*** (0.006)	-0.031* (0.012)	-0.054** (0.018)
Opp Size Unity	-0.240*** (0.067)	-0.233*** (0.068)	-0.097 (0.130)	-0.030 (0.189)
Court Cases	-0.008 (0.007)	-0.007 (0.007)	0.004 (0.013)	-0.020 (0.020)
Impact		-0.432*** (0.115)	0.671** (0.218)	1.127*** (0.310)
Complexity		-0.404* (0.197)	0.277 (0.297)	-0.196 (0.510)
Judicial Deadline		0.199*** (0.050)	0.207** (0.076)	0.058 (0.111)
Statutory Deadline		0.129*** (0.033)	0.050 (0.058)	0.090 (0.086)
Group Spending		0.021 (0.037)	-0.024 (0.086)	-0.007 (0.178)
Employment		-0.001 (0.001)	-0.004 (0.003)	-0.018 (0.009)
Year Fixed Effects	✓	✓	✓	✓
Bureau Stratification	✓	✓	✓	✓
Num events	11,022	11,022	2,750	1,097
Num obs.	205,160	205,160	52,540	20,385
PH test	0.16	0.16	0.88	0.99

*Note:* Model entries are coefficients obtained from proportional Cox models stratified by agency. Robust standard errors clustered on the rule are in parentheses. Models replicate Table 1 with year fixed effects in lieu of presidential administration fixed effects.

## Logit Specification

The models presented in the body of the paper employ Cox proportional hazards models. To demonstrate that the results do not hang on that particular modeling approach, in Table C10 I employ logit models with cubic time polynomials, following the method developed by Carter and Signorino (2010). Specifically, the models include variables  $Time$ ,  $Time^2$  and  $Time^3$  to account for potential time dependence. Using this alternate method results in the same substantive takeaway: agencies slow-roll and avoid issuing rules when the political climate is less favorable.

Table C10: Logit Models with Cubic Time Polynomials following Carter and Signorino's Approach

	All rules (43)	All rules (44)	High Impact rules (45)	Very High Impact rules (46)
OIRA Review Time (ln)	-0.034*** (0.007)	-0.033*** (0.007)	-0.032* (0.014)	-0.054** (0.021)
Opp Size Unity	-0.120 (0.062)	-0.130* (0.063)	-0.088 (0.127)	-0.080 (0.211)
Court Cases	-0.016* (0.006)	-0.014* (0.006)	-0.020 (0.012)	-0.040* (0.019)
Impact		-0.505*** (0.131)	0.920*** (0.248)	1.401*** (0.328)
Complexity		-0.381 (0.212)	0.114 (0.325)	-0.701 (0.599)
Judicial Deadline		0.247*** (0.056)	0.234** (0.089)	0.123 (0.124)
Statutory Deadline		0.159*** (0.042)	0.079 (0.076)	0.084 (0.113)
Employment		-0.001 (0.001)	-0.005 (0.004)	-0.021*** (0.006)
Group Spending		-0.050 (0.035)	-0.013 (0.072)	-0.042 (0.123)
Time	0.033*** (0.002)	0.034*** (0.002)	0.036*** (0.004)	0.029*** (0.007)
Time <sup>2</sup>	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)
Time <sup>3</sup>	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)
Constant	-2.866*** (0.192)	-1.812** (0.639)	-3.391* (1.317)	-3.522 (2.245)
President Fixed Effects	✓	✓	✓	✓
Bureau Fixed Effects	✓	✓	✓	✓
Num events	11,018	11,018	2,747	1,094
Num obs.	204,913	204,913	52,465	20,199
Pseudo Loglikelihood	-38856.9	-38826.3	-9499.7	-3719.5

*Note:* Model entries are coefficients obtained from logit models with cubic time polynomials. Robust standard errors clustered on the rule are in parentheses. Statistical significance: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

## Multilevel Specification

Tables 1 and 2 in the paper report the results of time to agency rule finalization with bureau-level stratification. The Cox approach I employ is advantageous because it is nonparametric, meaning that it does not require one to make strong assumptions about the shape of the distribution of duration times, and also because it readily incorporates time-varying covariates. However, it does not account for the nesting of bureaus within departments (e.g., the fact that the Food and Drug Administration is a component unit of the Department of Health and Human Services).

In Table C11, I account for the hierarchy of bureaus and departments in the data. Critically, accounting for this variation does not change the interpretation of the findings reported in the paper. Specifically, the models in Table C11 are three-level (i.e., rules within bureaus within departments) mixed effect models.<sup>7</sup> These are parametric Weibull models, which require much more restrictive assumptions about the distribution of the hazards of finalization times than Cox models. While the department- and bureau-level covariance parameters suggest there is meaningful variance at each of these levels, the substantive findings about political principals are not affected by accounting for this variance.

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<sup>7</sup>Models are estimated using the the `mestreg` command in Stata 14.

Table C11: Three-level Mixed Effects Weibull Models

	All rules (47)	All Rules (48)	High Impact Rules (49)
OIRA Review Time (ln)	-0.022*** (0.006)	-0.020** (0.007)	-0.030** (0.012)
Opp Size Unity	-0.056 (0.060)	-0.050 (0.061)	0.030 (0.117)
Court Cases	-0.012+ (0.006)	-0.012+ (0.006)	-0.026* (0.012)
Impact		-0.529*** (0.116)	1.017*** (0.231)
Complexity		-0.314 (0.208)	0.168 (0.322)
Judicial Deadline		0.293*** (0.054)	0.316*** (0.084)
Statutory Deadline		0.136*** (0.037)	0.045 (0.064)
Group Spending		0.027 (0.027)	0.051 (0.043)
Employment		-0.001 (0.001)	-0.002 (0.002)
President Fixed Effects	✓	✓	✓
ln $p$ Constant	0.150*** (0.007)	0.153*** (0.007)	0.137*** (0.015)
<i>Department-level variance component</i>			
Constant	0.129* (0.054)	0.112* (0.051)	0.146 (0.079)
<i>Bureau-level variance component</i>			
Constant	0.212*** (0.037)	0.214*** (0.037)	0.227*** (0.057)
Num events	11,022	11,022	2,750
Num obs.	205,160	205,160	52,540
Log likelihood	-14696.2	-14664.2	-3706.3

Note 1: Model entries are coefficients obtained from multilevel mixed effects parametric survival models with random effects at the department and bureau levels. Statistical significance: + $p < 0.10$ , \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

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