Online Appendix "Continuity and Change: The Evolution of the Law" June 7, 2007

The following tables present information we refer to in our paper, "Continuity and Change: The Evolution of the Law." More information about the justifications for these additional regressions can be found in our paper; below we describe the changes in these regressions when compared to the regressions we report in our paper. In most cases, we have discussed the logic behind the inclusion of such variables in the paper. In cases where we have not done so, we report the logic here. All footnote references in the online appendix refer to notes in the paper.

One additional note: The results presented here correspond to Model 2 in Table 1 of our paper. The results do not change in any measurable way if we instead use the specification in Model 1 of Table 1 (i.e., if we omit the *Sunset provision* variable).

Table A1 – Alternative Data Ranges

Model 1:

In the paper we exclude laws that realistically cannot be amended (see footnote 10), and thus that violate the assumptions of hazard models. In this model, we include those laws.

Model 2:

Because our *Court attention* variable is less accurate for the first two years of our analysis, here we exclude those first two years from the analysis (see footnote 16).

Table A2 – Party Change

In this table we include additional variables that account for changes in partisan control of the presidency and Congress. The argument for including such variables is that one potential alternative hypothesis is that laws are more likely to be amended when control over these institutions changes hands (see footnote 20).

Model 1:

Add *Change in party of president*. This is a dummy variable that indicates that the president in the current period is not from the same party as the president who signed the bill into law.

Model 2:

Add *Republican Congress*. This is a dummy variable that takes on the value of 1 following the Republican takeover of Congress in 1994. The results are the same if we also include 1954 in this variable; in what we report, we do not incorporate

1954 into this variable because it is at the very beginning of our dataset, before any of these laws were amended.

Model 3:

Combines the new variables from Models 1 and 2.

Model 4:

Add *Republican Senate*. This is a dummy variable that takes on the value of 1 for the years 1981-1986, in which the Republicans controlled the Senate.

Table A3 – Additional Robustness Checks

In this table we examine alternative specifications to test whether our results are sensitive to the inclusion or exclusion of variables.

Model 1:

To determine whether are results are driven by laws that fall into specific policy categories that require more frequent amendment, in this model we create dummy variables to indicate if a law falls into one of the following three categories: *Tax Policy, Foreign Policy,* and *Agriculture* (see footnote 20). The categories are taken from the appendix to Mayhew's *Divided We Govern* and supplemented by our own analysis. Results are same if we include each variable separately instead of including all three together.

Model 2:

This model also includes *First Year of Unified Government*, which follows on a suggestion, reported by Mayhew, that the first year of unified government is a period in which government should be especially active in passing and amending laws (see footnote 20).

Model 3:

This model includes *Veto*, which indicates whether the law was passed over a presidential veto, and *Voice vote*, which indicates whether the law was passed by a voice vote (see footnote 24).

Model 4:

This model drops *Policy mood* and *Court attention* from the regression to show that the inclusion of these variables does not influence our main findings (see footnotes 22 and 23). The results are the same if we include these variables separately instead of together.

Table A4 – Further tests of sunset provisions

This table reports the results using different measures of our sunset law variable (see footnote 26). The variable name in each row provides the description for how we coded each of these alternative versions. The only one that requires further elaboration is the fourth version, in which the law is coded as a 1 if the law contains a sunset provision. For this measure, unlike the previous versions of this variable, a law takes on a value of either 0 or 1 for the entire duration of the law. That is, the other versions take on a value of 0 until a sunset kicks in, at which time the value changes to 1. In this version, the variable takes on a value of 1 in the year the law was passed and keeps that value for all observations of that law in our dataset.

Table A5 – Expenditure laws susceptible to appropriations

This table examines whether laws that are especially dependent on appropriations are more susceptible to amendment (see footnote 25). Because our dependent variable fails to capture programmatic changes that result from the appropriations process, one might wonder whether our results are driven primarily by laws that are not dependent upon federal appropriations for their implementation. To explore this possibility we exploit the fact that whereas some programs (such as a law setting a minimum wage) are virtually immune from the appropriations process, others (such as the 1949 Housing Act) are more susceptible to changes via appropriations.¹ Although it is difficult to systematically discern whether changes in appropriations are designed to alter the nature of a program,² in the A5 models, we rely upon the *Congressional Quarterly Almanac* descriptions and/or the Mayhew (2005) policy codes to add a variable that controls for those laws in which spending is likely to play a prominent role.

Model 1:

The first version of this variable is coded as a 1 if the summary of the law, as reported in the *Congressional Quarterly Almanac*, reports any domestic projects or programs that require funding.

Model 2:

This version of this variable is coded as a 1 if the summary of the law, as reported in the *Congressional Quarterly Almanac*, reports any domestic projects or programs that require funding OR contains a foreign policy project or program (e.g., the FREEDOM Support Act of 1992, a package of economic aid for the former Soviet Republics). Note that if we include these variables separately, the results for the domestic variable are the same as reported in Model 1, while the results for foreign projects is small and insignificant.

¹ Many of the 810,000 public housing units promised in the 1949 Housing Act were never built because of the success that the pro-growth business community had in lobbying the House Appropriations Committee to de-fund previously-authorized public housing (Domhoff 2005).

² Interpreting changes that occur through the appropriations process is extremely complicated. Does a change in the amount appropriated represent an effort to change the program or does it stem from changing programmatic circumstances? For this reason, it is not surprising that neither Binder (2003) nor Mayhew (2005) include appropriations in their list of significant legislative accomplishments.

Model 3:

Identifies laws that are distributive in nature, by policy category (as identified in Mayhew's *Divided We Govern*. We identify the following policy areas as distributive: Agriculture, Cities, Housing, Nuclear Energy, Post Office, Public Lands, Transportation, Water Projects. Results are not sensitive to this specific list; additions or subtractions from it do not affect the results.

Model 4:

Similar to Model 1, except this variable takes on a value of 1 if the *Almanac* specifically mentions spending (and gives dollar amounts).

If these laws are systematically amended via the appropriations process, rather than by formal amendments, we would expect laws where domestic spending is prominent to be less likely to be subject to a formal amendment. Contrary to expectations, all of the expenditure coefficients in are positive and significant, suggesting that these laws are more, and not less, likely than other laws to be either expanded or contracted by a formal amendment.³ Importantly, inclusion of this variable does not change any of our other results.

Figure A1

This figure shows the distribution of amendments over time in order to demonstrate that there are no major "clumps" of amendments (i.e., periods in which a high proportion of the amending activity took place, and which therefore might be driving our results).

Appendix Bibliography

- Binder, Sarah A. 2003. *Stalemate: Causes and Consequences of Legislative Gridlock.* Washington, D.C.: Brookings.
- Domhoff, G. William. 2005. "Power at the Local Level: Growth Coalition Theory." *Who Rules America*. <u>http://sociology.ucsc.edu/whorulesamerica/power/local.html</u> (accessed on 6.12.06).
- Mayhew, David R. 1974. Congress: The Electoral Connection. Yale University Press.
- ----. 1991. Divided We Govern: Party Control, Lawmaking, and Investigations 1946-1990. New Haven, CT: Yale University Press.
- -----. 2005. *Divided We Govern: Party Control, Lawmaking, and Investigations 1946-2002*, 2nd ed. New Haven, CT: Yale University Press.

³ Such a finding contradicts the hypothesis that programs particularly dependent on the appropriations process are amended via the budgeting process, rather than formal statutory amendments. Nevertheless, the fact that these programs contain prominent spending initiatives, and thus provide valuable credit claiming opportunities (see Mayhew 1974), may account for why Congress is more likely to revisit these laws.

Table A1 Significant Amendments of Major Legislation Alternate Data Ranges				
	Expected Sign	1	2	
Enactment Political Conditions				
Divided government at enactment	+	0.47** (0.23)	0.59** (0.23)	
Chamber difference at enactment	+	37.56*** (9.74)	38.22*** (9.84)	
Subsequent Political Conditions		, <i>i</i>	, , , , , , , , , , , , , , , , , , ,	
Subsequent divided government	-	0.05 (0.26)	-0.03 (0.26)	
Subsequent chamber difference	-	-33.01*** (10.91)	-35.28*** (11.52)	
Policy mood	+	0.013 (0.03)	0.006 (0.03)	
Court attention	+	0.46** (0.25)	0.43** (0.25)	
Law Specific Characteristics				
Law complexity	+	0.002*** (0.0004)	0.002*** (0.0004)	
Divisiveness	-	-0.007* (0.006)	-0.012** (0.006)	
Sunset provision	+	0.52*** (0.21)	0.52*** (0.22)	
Non-proportionality controls		, <i>í</i>	, , , , , , , , , , , , , , , , , , ,	
Chamber diff. at enactment $* \ln(t)$		-13.70*** (5.09)	-13.94*** (5.24)	
Subsequent chamber diff. * $ln(t)$		12.35*** (5.05)	12.68*** (5.25)	
Number of observations		4211	3823	
Wald Chi-square		83.82***	86.07***	
Note: Cox regression, Breslow method one-tailed tests.	for ties. * deno	otes p<.10, ** denotes p<.	.05, and *** denotes p<.01,	

Table A2 Significant Amendments of Major Legislation						
Party Change						
	Expected Sign	1	2	3	4	
Enactment Political Conditions						
Divided government at enactment	+	0.47** (0.24)	0.62*** (0.24)	0.55** (0.26)	0.52** (0.26)	
Chamber difference at enactment	+	39.99*** (10.30)	39.10*** (10.04)	40.21*** (10.41)	34.99*** (10.99)	
Subsequent Political Conditions						
Subsequent divided government	-	-0.021 (0.26)	-0.028 (0.26)	-0.051 (0.27)	-0.13 (0.28)	
Subsequent chamber difference	-	-34.58*** (11.05)	-35.73*** (11.33)	-35.50*** (11.28)	-33.38*** (11.41)	
Policy mood	+	-0.009 (0.03)	-0.010 (0.03)	-0.008 (0.03)	-0.02 (0.03)	
Court attention	+	0.43** (0.25)	0.40* (0.25)	0.41** (0.25)	0.42** (0.25)	
Law Specific Characteristics						
Law complexity	+	0.002*** (0.0004)	0.002*** (0.0004)	0.002*** (0.0004)	0.002*** (0.0004)	
Divisiveness	-	-0.010** (0.006)	-0.011** (0.006)	-0.011** (0.006)	-0.010** (0.006)	
Sunset provision	+	0.51*** (0.21)	0.49*** (0.21)	0.50*** (0.21)	0.49** (0.21)	
Additional Tests						
Change in party of president	+	-0.27 (0.22)		-0.22 (0.23)	-0.20 (0.23)	
Republican Congress	+		-0.56 (0.45)	-0.45 (0.47)	-0.29 (0.49)	
Republican Senate	+				0.36* (0.26)	
Non-proportionality controls					, , ,	
Chamber diff. at enactment * ln(t)		-14.25*** (5.33)	-12.36*** (5.24)	-12.91*** (5.49)	-11.51** (5.57)	
Subsequent chamber diff. * ln(t)		12.50*** (5.20)	11.73** (5.33)	11.80** (5.37)	11.01** (5.47)	
Number of observations		4026	4026	4026	4026	
Wald Chi-square		86.96***	83.80***	85.42***	92.72***	
Note: Cox regression, Breslow method for ties. * denotes $p<.10$, ** denotes $p<.05$, and *** denotes $p<.01$, one-tailed tests.						

Table A3 Significant Amendments of Major Legislation					
	Expected Sign	1	2	3	4
Enactment Political Conditions	0				
Divided accomment of one strengt	±	0.51**	0.66***	0.54***	0.52***
Divided government at enactment		(0.23)	(0.25)	(0.23)	(0.22)
Chamber difference at enactment	+	37.72***	40.44*** (10.04)	38.23***	36.54***
Subsequent Political Conditions		(9.04)	(10.04)	(9.55)	(9.05)
Subsequent divided government	-	0.02	0.02 (0.26)	0.03 (0.27)	0.005 (0.25)
		-33.91***	-36.71***	-33.51***	-34.58***
Subsequent chamber difference	-	(11.15)	(11.31)	(11.11)	(10.64)
Policy mood	+	0.01	0.01	0.02	
		(0.03)	(0.03)	(0.03)	
Court attention	+	0.45**	0.43**	0.35*	
Law Specific Characteristics		(0.25)	(0.25)	(0.25)	
		0.002****	0.000	0.000****	0.000****
Law complexity	+	0.002^{***}	(0.002^{***})	(0.002^{***})	0.002^{***}
		-0.01**	-0.01*	-0.01*	-0.01**
Divisiveness	-	(0.006)	(0.006)	(0.006)	(0.006)
		0.49**	0.51***	0.55***	0.51***
Sunset provision	+	(0.22)	(0.21)	(0.21)	(0.21)
Additional tests					
Tax Policy	+	-0.02 (0.42)			
Foreign Policy	+	0.24 (0.38)			
Agriculture	+	0.23 (0.32)			
First Year of Unified Government	+		0.37 (0.32)		
Veto	-			-1.05* (0.70)	
Voice vote	-			-0.62** (0.29)	
Non-proportionality					
Chamber diff. at enactment * ln(t)		-13.32***	-14.55***	-14.44***	-12.89***
		(5.16)	(5.27)	(5.09)	(5.02)
Subsequent chamber diff. * ln(t)		12.48***	13.36**	12.47***	12.34**
		(5.17)	(5.26)	(5.17)	(5.09)
Number of observations		4026	4026	4026	4026
Wald Chi-square		86.76***	91.80***	97.81***	83.82***
Note: Cox regression, Breslow method	for ties. * denc	otes p<.10, **	denotes p<.05	, and *** deno	tes p<.01,
one-tailed tests.					

Table A4 Significant Amendments of Major Legislation Alternative Versions of Sunset Measure						
	Expected Sign	1	2	3	4	
Enactment Political Conditions						
Divided government at enactment	+	0.52** (0.23)	0.53*** (0.22)	0.52** (0.23)	0.48** (0.23)	
Chamber difference at enactment	+	38.37*** (9.75)	37.99*** (9.76)	38.02*** (9.76)	36.66*** (9.72)	
Subsequent Political Conditions		(2010)	(,,,,,)	(,,,,,)	(,,,_)	
Subsequent divided government	-	0.03 (0.26)	0.02 (0.26)	0.01 (0.26)	0.04 (0.26)	
Subsequent chamber difference	-	-34.46*** (11.04)	-34.88*** (11.09)	-33.53*** (11.04)	-33.87*** (11.04)	
Policy mood	+	0.01 (0.03)	0.01 (0.03)	0.01 (0.03)	0.01 (0.03)	
Court attention	+	0.41** (0.25)	0.41* (0.25)	0.45** (0.25)	0.44** (0.26)	
Law Specific Characteristics						
Law complexity	+	0.002*** (0.0004)	0.002*** (0.0003)	0.002*** (0.0003)	0.002*** (0.0004)	
Divisiveness	-	-0.011** (0.006)	-0.011** (0.006)	-0.010** (0.006)	-0.011** (0.006)	
Additional Tests						
Sunset provision (dummy=1 starting in <i>year of</i> sunset)	+	0.64*** (0.22)				
Sunset provision (dummy=1 starting in year after sunset)	+		0.58*** (0.25)			
Sunset provision (dummy=1 starting in <i>year before</i> sunset)	+			0.64*** (0.19)		
Sunset provision (dummy=1 if law contains sunset)	+				0.34** (0.19)	
Non-proportionality						
Chamber diff. at enactment $* \ln(t)$		-13.86*** (5.13)	-13.62*** (5.18)	-13.71*** (5.11)	-13.29*** (5.18)	
Subsequent chamber diff. * ln(t)		12.75*** (5.17)	12.88*** (5.23)	12.13*** (5.16)	12.22*** (5.21)	
Number of observations		4026	4026	4026	4026	
Wald Chi-square		87.89***	85.32***	97.92***	87.40***	
one-tailed tests.						

Table A5						
Significan	t Amendr	nents of Ma	ajor Legislat	ion		
Expenditure Laws Susceptible to Appropriations						
			ſ	Γ	1	
	Expected Sign	1	2	3	4	
Enactment Political Conditions						
Divided government at enactment	+	0.58*** (0.23)	0.57*** (0.22)	0.53*** (0.23)	0.57*** (0.23)	
Chamber difference at enactment	+	39.79***	39.70*** (9.52)	38.62***	40.61***	
Subsequent Political Conditions		().00)	().02)	().(=)	().()	
Subsequent divided government	-	-0.02 (0.26)	-0.02 (0.26)	-0.0002 (0.26)	-0.02 (0.26)	
Subsequent chamber difference	-	-36.79***	-36.89*** (11.02)	-33.62*** (10.84)	-36.05***	
Policy mood	+	0.02 (0.03)	0.02 (0.03)	0.01 (0.03)	0.02 (0.03)	
Court attention	+	0.49** (0.25)	0.50** (0.25)	0.51** (0.26)	0.48** (0.25)	
Law Specific Characteristics						
Law complexity	+	0.002*** (0.0004)	0.002*** (0.0004)	0.002*** (0.0003)	0.002*** (0.0004)	
Divisiveness	-	-0.012** (0.006)	-0.011** (0.006)	-0.011** (0.006)	-0.012** (0.006)	
Sunset provision	+	0.47**	0.48** (0.21)	0.50** (0.21)	0.42** (0.21)	
Additional Tests						
Expenditure Law (dummy=1 if law mentions specific domestic projects or programs)	-	0.49^{\dagger} (0.19)				
Expenditure Law (dummy=1 if law mentions specific domestic or foreign projects or programs)	-		0.48^{\dagger} (0.19)			
Expenditure Law (dummy=1 if a distributive policy area)	-			0.38^{\dagger} (0.20)		
Expenditure Law (dummy=1 if law mentions domestic spending)	-				0.58^{\dagger} (0.20)	
Non-proportionality						
Chamber diff. at enactment $* \ln(t)$		-14.39*** (5.03)	-14.32*** (5.04)	-13.56*** (5.02)	-14.68*** (5.10)	
Subsequent chamber diff. * ln(t)		13.08*** (5.26)	13.16*** (5.25)	12.15*** (5.09)	12.80*** (5.24)	
Number of observations		4026	4026	4026	4026	
Wald Chi-square		87.24***	86.80***	89.86***	88.76***	
Note: Cox regression, Breslow method	for ties. * d	enotes p<.10,	** denotes p<.0	05, and *** den	otes p<.01,	
one-tailed tests. † denotes significant at p<.01 in the positive direction (contrary to initial expectations).						

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Number of amendments per year

