E C O N O M I C S B U L L E T I N

Ideology, Shirking, and the Incumbency Advantage in the U.S. House of Representatives

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Abstract

This paper examines how the incumbency advantage is related to ideological voting or legislative shirking that causes the incumbents to diverge from the preference of the median voter using aggregate data for the U.S. House of Representatives between 1948 and 2000. I find that a rise in the incumbency advantage manifested in higher reelection rates increases the ideological divergence or polarization the U.S. House of Representatives. I also find that the average number of bills per congressman falls with greater ideological polarization. These findings suggest that ideological and non-ideological shirking rise with the incumbent reelection rate.

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1. Introduction

When political markets work efficiently, voters punish shirking[1] politicians by voting them out of office. High incumbent reelection rates in the U.S. Congress may seem to support this claim. However, it can be argued that this evidence is also consistent with the claim that incumbents enjoy a significant advantage over challengers, which allows them to conduct some amount of political shirking without being voted out of office. The idea that incumbents may choose to trade some of their votes for a chance to enact their own ideological preferences is not new. For instance, Sobel (1992) argues that the idea of viewing politicians simply as vote maximizing agents is naive. He models politicians as rational vote maximizing agents who also pursue their own interests even if it leads to being voted out of office and concludes that incumbents should be willing to trade some of the extra votes in exchange for pursuing their own ideological preferences. This paper investigates Sobel's (1992) claim empirically by analyzing the relationship between the incumbency advantage and political ideology.

In this paper, I avoid using the controversial ideology residual approach. Instead, I estimate an endogenous model that links the incumbent reelection rate to the ideological divergence or polarization in the U.S. House of Representatives. Berger et al. (2000) point out that voter risk aversion towards uncertainty can contribute to the incumbency advantage, which can be spent on legislative shirking. This idea serves as the motivation for the paper's empirical section. Using aggregate level data and 2SLS-IV estimator, I find that a rise in the incumbent reelection rate leads to a significant increase in the ideological divergence or polarization in the U.S. House of Representatives. If divergence from the median voter reflects legislative shirking, then my finding suggests that a rise in the incumbency advantage would increase shirking in the aggregate. I also find that the amount of introduced bills falls with greater ideological polarization, which could be interpreted as evidence of non-ideological shirking taking place as well. By examining shirking at the aggregate instead of individual level, I uncover new evidence pertinent to the overall efficiency of political markets that Bender and Lott (1996) find lacking in the literature.

2. Literature Review

The literature on political ideology and shirking is burgeoning with studies trying to answer the question of whether legislators shirk, but the evidence is still largely inconclusive. The canonical papers by Kau and Rubin (1979) and Kalt and Zupan (1984) argue that legislators often vote in a manner contrary to their constituents' interests. The idea behind these studies is very simple. If the ideology residual derived from general voting patterns is a significant determinant of legislators' voting behavior in addition to constituent characteristics, then one could argue that legislators deviate from the interests of their constituents (i.e. ideological voting or shirking exists). There have been many following studies testing this idea. For example, consider a study by Medoff et al. (1995) who find that Senate voting on the 1994 Freedom of Abortion Access bill was highly related to the senator's personal ideology and not to constituent opinion or demographics.

However, the Kalt and Zupan (1984) and similar studies have been challenged by the later findings of Lott and Bronars (1993), Lott and Davis (1992), and Vanbeek (1991) showing little or no evidence on legislator shirking using similar approaches. Moreover, Peltzmann (1984) argues that the ideology residual may be picking up omitted constituency variables. However, if legislators with higher victory margins or weaker electoral competition

[1] Shirking is defined here as an ideological consumption activity driven by politician's personal ideological preferences or some other factors that cause politician's legislation to diverge from the preferences of the median voter as the cost of shirking (i.e. reduced probability of reelection) falls. Political or ideological shirking (voting) is used interchangeably in this paper. Legislative shirking, however, could also refer to ideological as well as non-ideological shirking.

shirk more, argues Figlio (2000), then Lott and Bronars' (1993), Lott and Davis' (1992), and Vanbeek's (1991) findings understate the magnitude of the electoral response to shirking due to the endogenous nature of shirking. In fact, Figlio (2000) finds that a simultaneous modeling of electoral outcomes, shirking and opponent quality substantially increases the estimated relationship between shirking and electoral outcomes. Figlio (2000) also finds that voters tend to mind recent shirking more than shirking early in the senator's term. Another paper by Rothenberg and Sanders (2000) avoids the pitfalls of prior studies by utilizing a quasi-experimental research design contrasting the behavior of incumbents seeking reelection and those departing the U.S. House of Representatives. They find that a departing incumbent will change his or her participation rate and ideological position substantially more than a continuing legislator.

3. Empirical Model and Estimates

The incumbency advantage can come from a variety of sources such as unequal access to campaign resources, information asymmetry, and voter risk aversion. A rise in the incumbency advantage would allow incumbents to shirk more or legislate closer to their own ideological preferences. Like Berger et al. (2000), I argue that voter risk aversion towards uncertainty gives incumbents an advantage over challengers. The uncertainty driven advantage allows incumbents to diverge from the median voter in pursuit of legislative or ideological shirking without losing elections. These ideas suggest that incumbents would shirk more the greater is the incumbency advantage over challengers. This reasoning also implies that more incumbents who previously found it optimal to shirk more and lose their office would now be able to maintain their preferred level of shirking and stay in office. Therefore, a direct positive relationship should exist between reelection of incumbents and legislative shirking. In order to test this positive relationship empirically, it is sufficient to examine how the ideological distance between incumbents in the opposing political parties would change, thereby indicating a divergence from or convergence to the median voter. Hence, one can test the following hypothesis using a measure of political polarization or divergence derived from the ideology (D-NOMINATE) scores developed by Poole and Rosenthal (2001).

Hypothesis: Ideological divergence (polarization) and incumbent reelection rate are positively related.

This hypothesis should be tested using the 2SLS-IV estimator because the OLS estimator is likely to produce biased and inconsistent results in the presence of endogeneity bias.[2] The estimated equations using 2SLS-IV take on the following form in equations (1) and (2):

$$reelected = \beta_0 + \beta_1 redistricting + \beta_2 swing + \beta_3 turnout + \beta_4 bills + \beta_5 unemployment + \varepsilon_1 \qquad (1)$$

$$ideology = \beta_6 + \beta_7 \hat{reelected} + \beta_8 turnout + \beta_9 bills + \beta_{10} unemployment + \varepsilon_2 . \qquad (2)$$

Where *ideology* is a measure of ideological divergence or polarization, *reelected* is the incumbent reelection rate, *redistricting* is the dummy variable controlling for years when redistricting occurred, *turnout* is the voter turnout rate, *bills* is the average number of introduced bills per congressman, *swing* is the percentage of seats that changed party, and

[2] The Durbin-Wu-Hausman endogeneity test shown in Table 2 suggests that *reelected* is endogenous, which necessitates the use of 2SLS-IV estimator. The Hansen J over-identification of instruments test shown in Table 2 suggests that *bills* and *swing* are "good" instruments. Good instruments are those instruments that are correlated with the endogenous variable and uncorrelated with the error term.

unemployment is the unemployment rate. Ideological divergence or polarization is measured as the difference between Republican and absolute value of Democrat aggregate ideological (D-NOMINATE) scores for the House party coalitions developed by Poole and Rosenthal (2001). The ideological scores can range from -0.5 to 0.5. The negative range is arbitrarily assigned to liberal ideology and positive range to conservative ideology. Please refer to Table 1 for variable description and sources.

As the data availability has improved over time, it has become possible to collect just enough aggregate level data for an empirical investigation of ideological shirking. To the best of my knowledge, this is the first attempt of using aggregate level data in examining this issue. My regression sample spans from 1948 to 2000 in two year intervals and amounts to 27 observations. Data availability limits the amount of control variables and instruments that could be used without seriously depleting the degrees of freedom and weakening the power of statistical tests. The key variable of interest here is *reelected*. It represents the apparent re-election success of incumbents (84% on average during 1948-2000) or the incumbency advantage, which is hypothesized to be positively related to ideological divergence or polarization. By reverse logic, *reelected* also reflects lower challenger quality that allows incumbents to be more successful.

Instrumental variables such as *swing* and *redistricting* are included in the regression equation because they appear to be good instruments as confirmed by the Hansen J statistic shown in Table 2. The *swing* variable is intended to capture exogenous shifts in the political preferences of the voting population. For example, the 2006 U.S. Congressional elections resulted in many Democratic challengers replacing Republican incumbents, presumably for their handling of the Iraq war. This event would be reflected in a higher value of *swing* that should be negatively related to incumbent reelection rate. The *redistricting* variable is included to control for how political gerrymandering affects the incumbent reelection rate. The sign of *redistricting* is expected to be negative since the majority party in charge could use this tool to gain even more Congressional seats by defeating their toughest opponents (the other party's incumbents) resulting in a lower incumbent reelection or higher turnover rate. The rationale for including voter turnout is due to Downs' (1957) rational voter model that postulates that voters have more incentives to participate in a given election when they observe significant differences between competing candidates. Thus, one should expect a negative relationship between ideological divergence and voter turnout. Unemployment rate is included in the regression because economic performance has been found to be an important determinant of voting as it relates to political market efficiency (Peltzman, 1990). I hypothesize that unemployment should be negatively related to both incumbents' reelection success and to ideological divergence. The average number of introduced bills per congressman is included to capture congressmen's legislative productivity and how it relates to the ideological polarization. The average number of bills could reflect a participatory form of shirking found to be significant for departing incumbents in the U.S. House of Representatives (Rothenberg and Sanders, 2000).

The 2SLS-IV regression results are shown in Table 2. A number of interesting and statistically significant relationships become apparent. In the first stage regression, *swing* is a significant instrument for the *reelected* variable suggesting that exogenous changes or shifts in the ideological preferences of voters have the expected negative effect on incumbent reelection rate. Redistricting can also be used by one party against the other in order to eliminate the toughest competitors—incumbents. Reinforcing this intuitive explanation is the negative and statistically significant relationship between *reelected* and *redistricting* in the first stage of the regression. Most importantly, the incumbent reelection rate is found to be positively and significantly related to ideological divergence or polarization in the second stage regression. The average number of bills introduced per congressman is also found to be negatively and significantly related to ideological divergence. These results suggest the

existence of participatory shirking that increases with ideological shirking—a result also found by Rothenberg and Sanders (2000).[3] However, neither voter turnout nor unemployment rate appears statistically significant in the second stage of the 2SLS-IV regression, although both have the expected negative signs. Moreover, additional regressions results shown in Table 2 are obtained using the generalized method of moments (GMM) estimation technique, which has a number of advantages over the least squares estimation technique.[4] The IV-GMM regression results in Table 2 support the estimates from the first 2SLS-IV regression and also yield higher statistical significance for voter turnout and unemployment rate. Interestingly, voter turnout is negatively and significantly related to ideological divergence in the IV-GMM regression. This evidence suggests that ideological divergence decreases as voter participation increases, which is consistent with Downs' (1957) rational voter model's prediction. The first and second stage regressions shown in Table 2 are overall statistically significant and explain between 60 and 70 percent of variation in ideological divergence.

In order to compare and contrast the IV estimates to what would be obtained using the biased and inconsistent OLS estimator, I present two OLS regressions in Table 3 that do not treat *reelected* as endogenous variable. The first OLS regression that does not include the two instruments for *reelected* yields a positive coefficient estimate for incumbent reelection rate that is similar to those obtained in the IV regressions. However, the second OLS regression that includes the two instruments along with the other regressors yields a negative coefficient estimate for *reelected*. None of these two coefficient estimates are statistically significant though. As confirmed by the Durbin-Wu-Hausman endogeneity test, the biased and inconsistent OLS estimator performs worse than the 2SLS-IV estimator even if one independent variable is endogenous. Thus, the regression estimates obtained in this paper appear to support the proposed hypothesis that a rise in the incumbent reelection rate leads to more self-serving ideological legislation that departs from the median voter.

4. Conclusion

This paper examines the implications of the incumbency advantage for the principal-agent problem in the political market. It is argued that the incumbency advantage can emerge as a result of voter risk aversion towards uncertainty. This incumbency advantage can, in turn, be spent on ideological voting or shirking by incumbents. The empirical testing of this hypothesis using aggregate level data for the U.S. House of Representatives produces evidence pertinent to the overall efficiency of the political market. The efficiency of the political market is not automatically validated by the existence of political competitors (challengers) and requires a more rigorous investigation. As Mulligan and Tsui (2006) discover, the number of competitors is not necessarily a good indicator of public sector competitiveness and, therefore, efficiency.

The empirical findings in this paper reveal that a rise in the incumbency advantage manifested in higher reelection rates leads to a greater ideological divergence or polarization in the U.S. House of Representatives. This ideological divergence away from the median voter could be interpreted as the evidence of ideological voting or legislative shirking on behalf of incumbents. If this is so, then this evidence suggests that the political market for the U.S. House of Representatives is not very effective in preventing ideological voting by incumbents. It is also found that the number of bills introduced per congressmen falls with

[3] A finding of non-ideological or participatory shirking is consistent with the other findings in the literature showing that shirking may take the form of lower attendance rates and less frequent voting, especially for last-term legislators (Lott, 1987, 1990; Parker and Powers, 2002).

[4] For robust estimation in the presence of heteroskedasticity, autocorrelation, and outliers Yaffee (2003) recommends using generalized method of moments (GMM). GMM is often applied to models when the explanatory variables are not strictly exogenous even after controlling for an unobserved effect, according to Wooldridge (2001).

greater ideological polarization. This evidence suggests that some non-ideological shirking takes place as well—good news for those who believe that the best government is the one that does least (in terms of introduced bills). Moreover, ideological shirking may not be "bad" if Caplan (2007) is right in arguing that voter errors are systematically biased against sound economic policy. In other words, a less than perfect adherence to the median voter's preference might be preferred if democracy, according to H. L. Mencken, "is a pathetic belief in the collective wisdom of individual ignorance."

Appendix

TABLE 1
Variable Description and Sources

Variable Name (source)	Description	Mean (st. dev.)
Ideological divergence (1)	Ideological divergence = (Republican ideology index - |Democrat ideology index|) in a given year.	0.60 (0.12)
Democrat ideology index (1)	Aggregate ideological index (D-NOMINATE) for the Democratic party coalition developed by Poole and Rosenthal (2001).	-0.28 (0.05)
Republican ideology index (1)	Aggregate ideological index (D-NOMINATE) for the Republican party coalition developed by Poole and Rosenthal (2001).	0.32 (0.08)
Percent of incumbents reelected (1)	Percentage of incumbents reelected that were seeking reelection in an election year.	84.43 (4.93)
Redistricting dummy (1)	Takes on 1 if redistricting occurred in a given year or 0 otherwise.	0.19 (0.40)
Percent of seats that changed party (1)	Percentage of seats in Congress that changed party affiliation in a given year.	4.77 (4.52)
Voter turnout (1)	Percentage of eligible voters who cast a ballot in a given election year.	45.25 (7.83)
Bills per congressman (1)	Average number of bills introduced per congressman in a given year.	26.83 (12.42)
Unemployment rate (2)	Percentage of the civilian labor force that is not employed, but currently seeking work.	5.63 (1.50)

1. Ornstein, N., Mann, T. & Malbin, M. (2002). *Vital Statistics on Congress. 2001-2002*, AEI Press, Washington D.C..
2. U.S. Department of Labor: Bureau of Labor Statistics, www.bls.gov.

TABLE 2
Endogenous Specification of Determinants of Ideological Divergence (Polarization), U.S. House of Representatives, 1948-2000

1st Stage Regression. Dependent Variable: Percent of Incumbents Reelected.		
Estimation Method	2SLS-IV	IV-GMM
Observations	27	27
Redistricting dummy† (*redistricting*)	-4.9114***	-4.9114***
	(1.7942)	(1.7942)
Percent of seats that changed party† (*swing*)	-0.8361***	-0.8361***
	(0.1192)	(0.1192)
Voter turnout (*turnout*)	-0.0613	-0.0613
	(0.0831)	(0.0832)
Bills per congressman (*bills*)	0.0070	0.0070
	(0.0526)	(0.0526)
Unemployment rate (*unemployment*)	-0.4679	-0.4679
	(0.4759)	(0.4759)
Constant	94.55***	94.55***
	(4.89)	(4.89)
F-statistic	10.82	10.82
Overall P-value	0.0000	0.0000
Centered R-squared	0.6778	0.6778
Durbin-Wu-Hausman endogeneity test, P-value	0.0395	0.0395
Hansen J over-identification test, P-value	0.8513	0.8513
Partial R-squared test of excluded instruments, P-value	0.0000	0.0000
Shea partial R-squared	0.6639	0.6639
2st Stage Regression. Dependent Variable: Ideological Divergence.		
Percent of incumbents reelected (*reelected*)	0.0063**	0.0064**
	(0.0030)	(0.0030)
Voter turnout (*turnout*)	-0.0030	-0.0029*
	(0.0017)	(0.0016)
Bills per congressman (*bills*)	-0.0071***	-0.0071***
	(0.0010)	(0.0011)
Unemployment rate (*unemployment*)	-0.0120	-0.0123
	(0.0088)	(0.0086)
Constant	0.4481	0.4490*
	(0.2736)	(0.2736)
F-statistic	13.22	13.36
Overall P-value	0.0000	0.0000
Centered R-squared	0.6624	0.6614

Notes: Dependent variable: Ideological divergence = (Republican ideology index - |Democrat ideology index|). Robust standard errors are shown in parentheses. Significance levels: *** at 1%, ** at 5%, and * at 10%. †Instruments used in the 1st stage regression for the endogenous variable--percent incumbents reelected. The Durbin-Wu-Hausman test rejects the exogeneity of percent incumbents reelected, while the Hansen J test fails to reject the instruments.

TABLE 3
Exogenous Specification of Determinants of Ideological Divergence (Polarization), U.S. House of Representatives, 1948-2000

Dependent Variable: Percent of Incumbents Reelected.		
Estimation Method	OLS	OLS
Observations	27	27
Voter turnout (*turnout*)	-0.0031*	-0.0036**
	(0.0016)	(0.0017)
Bills per congressman (*bills*)	-0.0072***	-0.0071***
	(0.0012)	(0.0011)
Unemployment rate (*unemployment*)	-0.0144	-0.0178**
	(0.0100)	(0.0083)
Percent of incumbents reelected (*reelected*)	0.0025	-0.0051
	(0.0032)	(0.0043)
Redistricting dummy (*redistricting*)	-	-0.0502
		(0.0370)
Percent of seats that changed party (*swing*)	-	-0.0097**
		(0.0047)
Constant	0.8021***	1.5328***
	(0.2860)	(0.4043)
F-statistic	14.25	10.12
Overall P-value	0.0000	0.0000
R-squared	0.6873	0.7368

Notes: Dependent variable: Ideological divergence = (Republican ideology index - |Democrat ideology index|). Robust standard errors are shown in parentheses. Significance levels: *** at 1%, ** at 5%, and * at 10%.

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