Online Appendix for Logan Dancey, Matthew Tarpey, and Jonathan Woon,

"The Macro Dynamics of Partisan Advantage" *Political Research Quarterly*

Auto-Distributed Lag Model

As noted in the text, we check the robustness of our results in Table 1 by comparing them to a traditional Auto-Distributed Lag (ADL) setup. In the ADL framework, aggregate partisan advantage is modeled as a function of its lagged value and a combination of contemporaneous and lagged values of the independent variables of interest. Since the effect of our key variables of interest depend on partisan control of the particular institution, we interact the performance indicators with the partisan control variables

Table A1 displays the results from a model where Democratic Advantage is modeled as a function of its lagged values and the contemporaneous and lagged values of presidential approval, congressional approval, and policy mood. The model shows a clear link between the president's popularity and the relative standing of the two parties. As presidential approval increases during a Democratic administration, the public tends to perceive the Democrats as better able to handle public policy. The interaction between Presidential Approval and Republican control of the presidency is negative and statistically significant. Therefore, the link between presidential approval and the relative standing of the two parties is in the direction we would expect across both Republican and Democratic administrations. Consistent with the results in Table 1, however, we do not find a statistically significant relationship between congressional approval and Democratic Advantage for either Democratic or Republican congresses. In addition, the coefficients on congressional approval are incorrectly signed during Democratic Congresses.

Table A1: Auto-Distributed Lag Model

	Democratic Advantage
Democratic Advantage$_{t-1}$	0.70***
	(0.05)
Divided Congress	-0.43
	(1.05)
Divided Government	-0.30
	(0.37)
Policy Mood	-0.00
	(0.06)
Policy Mood $_{t-1}$	-0.10
	(0.06)
Congressional Approval	-0.07
	(0.05)
Congressional Approval $_{t-1}$	-0.02
	(0.06)
Presidential Approval	0.17***
	(0.04)
Presidential Approval $_{t-1}$	-0.05
	(0.03)
GOP Congress	0.02
	(1.47)
GOP President	9.87***
	(2.19)
GOP Congress x Congressional Approval	-0.00
	(0.05)
GOP Congress x Congressional Approval $_{t-1}$	0.01
	(0.02)
GOP President x Presidential Approval	-0.27***
	(0.04)
GOP President x Presidential Approval $_{t-1}$	0.11***
	(0.02)
Divided Congress x Congressional Approval	-0.10
	(0.08)
Divided Congress x Congressional Approval $_{t-1}$	0.11
	(0.08)
Constant	18.36***
	(3.16)
Observations	145
R^2	.90
Breusch-Godfrey	.97

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Vector Auto-Regression Model

Previous time-series analysis of U.S. national politics has specified different functional relationships between the covariates of interest in our analysis. For example, Lebo and Box-Steffensmeier (2008) and Ramirez (2009) both model congressional approval as a function of presidential approval. Furthermore, Erikson, MacKuen, and Stimson (2002) use changes in policy mood to predict changes in congressional and presidential approval. It is also possible that instead of presidential approval leading to changes in Democratic Advantage the relationship runs, at least in part, the other way.

To test whether our results are robust to a specification that relaxes assumptions about exogeneity, we estimated a vector autoregression where presidential approval, congressional approval, policy mood, and Democratic Advantage were all treated as potentially endogenous. Presidential approval and congressional approval were both demeaned and multiplied by -1 in periods where Republicans controlled the institution to avoid having to estimate a dynamic multiplicative set up (see also MacKuen, Erikson, and Stimson 1989). We chose to treat the House majority party as the party in control of Congress given the central role that the House plays in Cox and McCubbins (1993, 2005). The findings are substantively similar if we restrict our analyses to only quarters where both the House and Senate were controlled by one party.

Lag length tests suggested that one lag provided the best model fit. Results from the VAR model indicate that lagged presidential approval is a significant predictor of future Democratic advantage (p<0.01) but lagged Democratic advantage does not predict future values of presidential approval (p=0.83). No other variables in the model exert a significant effect on presidential approval nor Democratic advantage. Granger causality tests from models with two, three, and four lag lengths produce substantively similar results. The results from the VAR

models are therefore consistent with the results from the main table in the text, suggesting

changes in presidential approval (but not congressional approval or policy mood) predict changes

in Democratic Advantage.

Table A2: VAR analysis

	Democratic Advantage	Presidential Approval	Congressional Approval	Policy Mood
Democratic Advantage$_{t-1}$	0.69***	-0.04	-0.21	0.04
	(0.06)	(0.22)	(0.13)	(0.07)
Presidential Approval$_{t-1}$	0.07***	0.88***	0.01	-0.02
	(0.02)	(0.06)	(0.04)	(0.02)
Congressional Approval$_{t-1}$	-0.01	-0.00	0.89***	0.02
	(0.02)	(0.06)	(0.04)	(0.02)
Policy Mood$_{t-1}$	0.04	0.07	-0.07	0.88***
	(0.03)	(0.11)	(0.07)	(0.04)
Constant	13.82***	-2.50	16.20*	4.73
	(3.56)	(12.55)	(7.72)	(4.16)
Observations	145	145	145	145

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure A1: Majority Party Rolls Over Time