THE GENESIS OF INDEPENDENT AGENCIES

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This Article sheds light on significant doctrinal and policy issues that are central to the proper understanding of the administrative state. It grapples with a core question of administrative law: when are agencies established with features that insulate them from direct presidential control? Because of its constitutional significance, the legal literature focuses on removal protection for agency heads, and posits that agencies are more likely to be accorded such protection when the presidency and at least one of the chambers of Congress are controlled by different parties. The empirical support for this claim comes from a single political science study, which suffers from significant design flaws and has been widely misinterpreted. In fact, it shows that under almost all plausible scenarios Congress is less likely to vest agencies with indicia of independence under divided government.

To properly study the factors that affect the probability that agencies will be accorded indicia of independence, we constructed and analyzed a new dataset. Three principal variables have a statistically significant impact: the approval rating of the President, the size of the Senate majority, and the alignment of the political party of the Senate majority and the President. The latter two variables had never been tested prior to our study. We find that Congress is less likely to establish agencies with indicia of independence when the President is popular. Moreover, when the Senate majority is not aligned with the President, an increase in the majority makes it more likely that Congress will establish an agency with indicia of independence. And, for a given size of Senate majority, alignment with the President makes it more likely that Congress will establish an agency with indicia of independence. Changes in the composition of the House do not produce comparable effects, suggesting that the Senate’s filibuster rule might play a role in this regard. The Article also explores the limitations of the quantitative empirical findings and the benefits of also performing detailed case studies.

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INTRODUCTION

The status of independent agencies—agencies that are insulated in at least some ways from direct presidential control—is a significant concern of administrative law. Recently, the legal literature has paid sustained attention to the factors leading the formation of independent agencies, focusing on the circumstances that make it more likely for agencies to have features insulating them from control by the President.

Two leading theories related to the creation of independent agencies have emerged. The New Deal Hypothesis states that Congress was more likely to establish independent agencies during the New Deal than during other time periods. The most frequently cited motivation attributed to New

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2 For discussion of the insulating features analyzed in this article, see infra text accompanying notes 139-147.

3 See John William Anderson, Jr., Regulatory and Supervisory Independence: Is There A Case for Independent Monetary Authorities in Brazil?, 10 LAW & BUS. REV. AM. 253, 297 n.42 (2004) (“The second wave, contemporaneous to the ‘New Deal,’ was characterized by the creation of independent agencies in several sectors with legislative, adjudicative, and executive functions.”); Bressman & Thompson, supra note 1, at 615-16 (“[I]t was during the New Deal that Congress seeded independent agencies across the regulatory spectrum.”); Gary J. Edles, The Almost Accidental Start of a New Federal Agency, FED. L.AW., Jan. 2000, at 32, 32, 34 (“Creation of the traditional, independent multi-member regulatory agency, which combines legislative, executive, and judicial functions in one place, and has bipartisan membership and relative
Deal congresses with respect to the creation of independent agencies is the desire to see those agencies run by technocratic experts. Some scholars also attribute the desire of New Deal congresses to protect the integrity of agency adjudication processes as a reason for why New Deal congresses chose to establish independent agencies. The legal literature does not adduce any empirical support for the New Deal Hypothesis and we are not aware of any prior empirical studies on this question.

The Divided Government Hypothesis posits that agencies established during periods of divided government are more likely to have indicia of independence. In the legal literature, it is the leading hypothesis for the establishment of independent agencies, and, in particular, of agencies with removal protection provisions for their heads. For empirical support,

8 insulation from presidential control, was at its zenith during the New Deal . . . .” (emphasis added); Stavros Gadinis, From Independence to Politics in Financial Regulation, 101 CAL. L. REV. 327, 337 (2013) (“In the United States, independent agencies were a hallmark of the New Deal effort to build an efficient bureaucracy.”); Note, The SEC Is Not an Independent Agency, 126 HARV. L. REV. 781, 793 (2013) (“[T]he New Deal is widely associated with the proliferation of independent agencies.”); Cass R. Sunstein, Constitutionalism After the New Deal, 101 HARV. L. REV. 421, 492 (1987) (“The independent agency . . . is the model of the New Deal institution.”); Verkuil, supra note 1, at 257 (The New Deal was “the golden age of the independent agency”); Christopher S. Yoo et al., The Unitary Executive in the Modern Era, 1945-2004, 90 IOWA L. REV. 601, 606 (2005) (New Deal “witnessed the rise of the so-called independent agencies”). But cf. F. Scott Boyd, Florida's ALJs: Maintaining A Different Balance, 24 J. NAT'L ASS'N ADMIN. L. JUDGES 175, 230 n.43 (2004) (“Roosevelt’s New Deal agencies, with which the [Administrative Procedure Act] history is so intertwined, were almost exclusively executive branch agencies.”).

1 See, e.g., Bressman & Thompson, supra note 1, at 612 (“Independence was traditionally justified, particularly during the New Deal era, as promoting expertise.”); Adam J. Levitin, The Politics of Financial Regulation and the Regulation of Financial Politics: A Review Essay, 127 HARV. L. REV. 1991, 2038 (2014) (“New Dealers envisioned technocratic regulatory agencies as the antidote to the power of white-shoed titans of industry.”).

2 See Philip J. Harter, Executive Oversight of Rulemaking: The President Is No Stranger, 36 AM. U.L. REV. 557, 559-60 (1987) (underscoring the New Deal’s structural model’s interest in protecting “the integrity of adjudication which constituted the main way, if not the only way, that agencies functioned”).


4 “Divided government” is generally defined as any time the President and the majorities in the House and Senate did not all share the same party affiliation. “Unified government” is defined as any time the presidency and the majorities in the House and Senate are all controlled by the same party. See id. at 55.

5 See, e.g., Rachel E. Barkow, Insulating Agencies: Avoiding Capture Through Institutional Design, 89 TEX. L. REV. 15, 28, 28n.58 (2010) (“The independent model of for-cause removal is typically selected during divided government when Congress is controlled by a different party than the presidency.”); Datla & Revesz, supra note 1, at 798, 798 n.157 (noting that “Congress employs insulating characteristics and partisan balance requirements more often in periods of divided government”); Neal Devins, Signing Statements and Divided Government, 16 WM. & MARY BILL RTS. J. 63, 72 n.43 (2007) (stating that “Congress seeks to create politically insulated agencies during periods of divided government”); Neal Devins & David E. Lewis, Not-So Independent Agencies: Party Polarization and the Limits of Institutional Design, 88 B.U. L. REV. 459, 464 & n.24-25 (2008) (noting that “the percentage of new agencies with insulating characteristics correlates with periods of divided government.”); Ronald J. Krotoszynski, Jr., et al., Partisan Balance Requirements in the Age of New Formalism, 90 NOTRE DAME L. REV. 941, 980-81, 981n.257 (2015) (“Some scholars have opined that the greatest push for independence in administrative agencies comes at times when the parties enjoy divided control over Congress (or at least one chamber) and the White House.”).

6 See, e.g., Barkow, supra note 8, at 14 (“According to the existing legal literature and case law, the defining hallmark of an independent agency is that it is headed by someone who cannot
commentators that refer to the Divided Government Hypothesis rely exclusively on a study by Professor David Lewis.\footnote{10} The reason adduced for the impact of divided government on agency structure is that Congress is less willing to give the President fuller control of a new agency when the President is of a different party than at least one of the congressional chambers.\footnote{11}

Despite its significant influence on the legal literature, the Lewis study provides no credible support for the hypothesis that Congress is more likely to vest agencies with removal protection during periods of divided government. First, Lewis never tested the determinants of removal protection, which the legal literature has traditionally taken to be the defining characteristic of independence,\footnote{12} and which has been the source of most of the Supreme Court disputes concerning independent agencies.\footnote{13}

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\footnote{10} See sources cited supra notes 8-9.

\footnote{11} See, e.g., Barkow, supra note 8, at 28 (arguing that Congress enacts “for cause” removal provisions because it “is interested in making sure that the minority party in the legislature does not exert greater influence over the agency through presidential power.”); Devins & Lewis, supra note 8, at 464 (“When members of Congress fear the administrative influence of the current President on policies post-enactment, they are more likely to establish independent commissions to implement their policies.”).

\footnote{12} See Breger & Edles, supra note 1, at 1138 (“The critical element of independence of an agency is the protection against removal except ‘for cause.’”); Datla & Revesz, supra note 1, at 776 & n.24 (“The consensus view is that the dividing line [between executive and independent agencies] is the presence of a for-cause removal provision.”).

None of his empirical work can be seen as providing support for the proposition that Congress is more likely to vest agency heads with removal protection during periods of divided government.

Second, Lewis uses fixed terms as a proxy for removal protection, but there is no support in the Supreme Court case law or in the academic literature for treating these two concepts as equivalent. Third, Lewis seeks to test whether Congress is more likely to grant insulating characteristics under divided government when the congressional majority is strong. But his test, which looks at the strength of the majority party in the House of Representatives, does not distinguish between instances when the House is aligned with the President (though the Senate is not) from those when the House is not aligned with the President. His results actually show that, for practically all plausible configurations of majority strength, divided government actually decreases the probability that Congress would vest insulating characteristics in administrative agencies—the opposite of the conclusion that the legal literature attributes to it.\(^{14}\)

In this Article, using a dataset that we constructed and that had not previously been analyzed, we seek to determine what factors make it more likely that agencies will be accorded what we call “indicia of independence” at the time of their creation.\(^{15}\) We find that three principal factors play a statistically significant role in making it more or less likely that Congress establishes agencies with certain indicia of independence: the approval rating of the President, the size of the Senate majority, and the alignment of the political party of the Senate majority and the President. Of these three variables, the latter two had never been tested prior to our study.\(^{16}\) In general, we find that Congress is less likely to establish agencies with indicia of independence when the President is popular. Additionally, the size of the Senate majority affects whether Congress establishes agencies with indicia of independence. When the Senate majority party is not aligned with the President, an increase in the size of the majority makes it more likely that Congress will establish an agency with indicia of independence. And, for a given size of Senate majority, alignment with the President makes it less likely that Congress will establish an agency with

\(^{14}\) One legal commentator cites Lewis for the correct proposition: that in the face of divided government, “the probability that agencies created will be insulated from presidential control increased with the size of the congressional majority.” Kevin M. Stack, The President's Statutory Powers to Administer the Laws, 106 Colum. L. Rev. 263, 290 & n.124 (2006). However, this probability, for most plausible configurations, turns out to be lower than under unified government. See infra text accompanying notes 106-109.

\(^{15}\) See Datla & Revesz, supra note 1, at 784; infra notes 139-147 and accompanying text.

\(^{16}\) Our approach is superior to the approach in the Lewis study because it allows us to test how the impact of the size of the majority in each of the chambers of Congress varies depending on whether that chamber is aligned with the President. See infra Part IV.
indicia of independence. Changes in the composition of the House do not produce comparable effects, suggesting that the Senate’s filibuster rule might play a role in this regard. 17

However, these variables, though statistically significant, do not have high explanatory power. The Lewis study had not done a comparable analysis but we were able to perform the test on his dataset and found that, there too, the explanatory power of the statistically significant variables was limited. 18 Other unexplained factors, which we do not control in our models, appear to explain the majority of the variation in the decision to insulate agencies from presidential control.

Some commentators have expressed the view that randomness explains the conferral on agencies of indicia of independence. For example, Neal Devins indicates that “[i]t is not surprising that ‘random selection’ may explain Congress’ choice of an independent over an executive format.” 19 Similarly, according to Paul Verkuil, “[n]ew agency structures often appear to be established in a vacuum or almost by random selection.” 20

The relatively low explanatory power of the empirical models could be seen to lend support to this view. For example, the Environmental Protection Agency (EPA), the Occupational Health and Safety Administration (OSHA), and the Consumer Product Safety Commission (CPSC) were all established within two years of each other, during President Nixon’s first term, the first two as executive agencies and the third as an independent agency with removal protection and other indicia of independence. 21 When the EPA and OSHA were established in December 1970, 22 President Nixon, a Republican, had an approval rating of 52%. 23

17 See infra text accompanying notes 139-147.
18 See infra text accompanying note 197.
20 Verkuil, supra note 1, at 258-59.
21 See Datla & Revesz, supra note 1, at 786, 790, 793, 797-98, 800, 804, and 809.


23 Presidential approval rating as measured by the Gallup poll, on the most recent polling date before each agency was established. See Presidential Job Approval Center, GALLUP, http://www.gallup.com/poll/124922/presidential-job-approval-center.aspx (click on Nixon 1969-1974).
and both chambers of Congress were controlled by Democrats, in the House by a majority of 243-192 and in the Senate by a majority of 57-43. When the CPSC was established less than two years later, President Nixon’s approval rating was 58%, and the Democratic majorities were 255-180 in the House and 54-44-1-1 in the Senate. The traditional determinants were quite similar at the time of the establishment of EPA and OSHA on the one hand and the CPSC on the other: divided government, similar Democratic congressional majorities and presidential approval in both instances. Thus, these factors are unlikely to explain why the EPA and OSHA are under presidential control but the CPSC has significant insulating characteristics.

But randomness is probably best understood as cover for variables that have not been accounted for. In this connection, the role of policy entrepreneurs should not be overlooked. For example, Elizabeth Warren, widely regarded to be the architect of the Consumer Financial Protection Bureau (CFPB), advocated forcefully for giving the CFPB independent budget authority. The resulting arrangement, under which the CFPB receives funds directly from the Federal Reserve System, and its budget is not reviewed by either the Congress or the Office of Management and Budget, is a very unusual one. It is unlikely that the CFPB would have

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29 See 12 U.S.C § 5497(a)(1) (2012) (providing that the Bureau will obtain “from the combined earnings of the Federal Reserve System, the amount determined by the Director to be reasonably necessary to carry out the authorities of the Bureau . . .”.
30 See id. § 5497(a)(2)(C) (2012) (providing that the CFPB budget “shall not be subject to review by the Committees on Appropriations of the House of Representatives and the Senate . . . ”); id. § 5497(a)(4)(E) (2012) (“This subsection may not be construed as implying any obligation on the part of the Director to consult with or obtain the consent or approval of the Director of the Office of Management and Budget with respect to any report . . . or any jurisdiction or oversight over the affairs or operations of the Bureau.”).
31 See Steven A. Ramirez, Depoliticizing Financial Regulation, 41 WM. & MARY L. REV., 503, 525 (2000) (writing 11 years before the creation of the CFPB that “the Fed is the only regulatory agency that is totally self-funded and free from the appropriates process.”); see also
achieved this level of budgetary independence without Warren’s zealous advocacy.

The statistical significance of important structural variables such as presidential approval, Senate majority, and Senate alignment, coupled with the lack of high explanatory power of these variables suggests that, to best understand the structure of the administrative state, quantitative empirical work should be coupled with case studies, which can provide important context for the study of administrative law. Such case studies would reveal, for example, the strong influence of a successful policy entrepreneur like Warren.

This Article makes possible a more sophisticated understanding of the institutional relationships that affect the characteristics of administrative agencies, thereby shedding important light on a key current debate concerning the administrative state. In turn, by providing support for one side of the debate, this Article has significant doctrinal and policy payoffs.

As one of us has noted, “the conventional wisdom is that there are two types of agencies: executive and independent.” And, “[e]ach type of agency comes with a set of rules that govern how the President may interact with them.” In contrast, the “continuum” view rejects the two-category formulation and the presence of a clear dividing line.

If the granting of significant indicia of independence followed inexorably from divided government, the binary view would have a clear structural explanation, reflecting the wishes of the opposition party to constrain the power of the President. But if there is no significant support for the divided government hypothesis and if even the alignment of the Senate explains relatively little of the pattern, as this Article’s empirical

Charles Kruly, Self-Funding and Agency Independence, 81 GEO. WASH. L. REV. 1733, 1735 (2013) (“Until the CFPB, and with the longstanding exception of the Federal Reserve Board of Governors . . . , Congress has utilized self-funding in only a limited number of ‘narrowly-focused’ independent agencies.”); Note, supra note 27, at 1823 (“A complete exemption from appropriations is rare.”).

32 For examples of the use of case studies in administrative law, see Aldon F. Abbott, Case Studies on the Costs of Federal Statutory and Judicial Deadlines, 39 ADMIN. L. REV. 467 (1987) (using case studies to examine the costs associated with statutory deadlines for agency action); Jerry L. Mashaw, Federal Administration and Administrative Law in the Gilded Age, 119 YALE L. J. 1362 (2010) (using case studies to examine the development of administrative law in the 19th century); Richard E. Levy & Robert L. Glickman, Agency-Specific Precedents, 89 TEX. L. REV. 499 (2011) (using case studies to examine their idea of “agency-specific precedents,” where courts rely on heavily on precedent of the agency under review, even for general administrative law principles).


34 Datla & Revesz, supra note 1, at 775-76.

35 Id. at 776.

36 See id. at 825-27.
study shows, the structural reason for placing agencies in two airtight categories disappears.

Why does this matter? On the doctrinal front, dictum in *Wiener v. United States*,37 supports the binary view, separating executive agencies from those that require “absolute freedom from Executive interference.”38 This dictum implies that the existence of an insulating characteristic specified by statute can be used to bootstrap other insulating characteristics on which Congress was silent.39 The dictum has already come under attack,40 and this Article provides empirical support for that attack.

On the policy front, many current controversies focus on the President’s power over agencies with removal protection for their heads. For example, in 2014 and 2015, President Obama was the subject of significant criticism for pushing the Federal Communications Commission to adopt a net neutrality regulation.41 Similarly, there is currently sustained academic debate on whether the President has the authority to require financial regulatory agencies, including the CFPB, to submit their regulations to the Office of Information and Regulatory Affairs for review under the President’s Executive Order requiring significant rules to be justified by reference to cost-benefit analysis.42 Also, under the next Democratic administration, further efforts to control greenhouse gases are likely to be a priority.43 In that case, the decision by the Federal Energy Regulatory Commission (FERC), recently upheld by the United States Court of Appeals for the District of Columbia Circuit, not to use the Social Cost of Carbon to evaluate the harm of carbon dioxide emissions, despite an Executive branch Interagency Working Group validation of this approach,44 could well become a flash point.45 In all of these cases, the

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38 Id. at 353.
39 See Datla & Revesz, supra note 1, at 833
40 See id. at 832-35.
43 The 2016 Democratic Party Platform included a commitment to “reducing greenhouse gas emissions more than 80 percent below 2005 levels by 2050,” upholding the Paris Agreement and promising “to take bold steps to slash carbon pollution.” In addition, the Democratic Party Platform stated that “Democrats believe that carbon dioxide, methane, and other greenhouse gases should be priced to reflect their negative externalities.” See DEMOCRATIC PLATFORM COMMITTEE, 2016 DEMOCRATIC PARTY PLATFORM 27 (2016).
statutes are silent on the actions that President Obama has taken, or that future Presidents might take. By providing empirical support for the attack on the binary view, this Article supports a broad assertion of presidential power in these areas.

This Article proceeds as follows. In Part I, we analyze the Lewis study and show why it does not support, and to a large extent contradicts, the proposition that the legal literature generally attributes to it. Part II describes the new dataset that we constructed for our empirical analysis. In Part III.A, we present a visual evaluation of the New Deal Hypothesis and the Divided Government Hypotheses by providing charts showing patterns of congressional grants of indicia of independence to agencies across time.

Parts III.B and III.C present simple bivariate tests of statistical significance for the New Deal Hypothesis and the Divided Government Hypothesis, respectively. We find that Congress was more likely to establish agencies as multimember commissions with specified tenures during the New Deal than during other time periods, but we do not find similar support for removal protection or other indicia of independence. We also find virtually no support for the proposition that Congress is more likely to vest agencies with indicia of independence when the presidency and at least one chamber of Congress are controlled by different parties.

In Part IV, we evaluate the Divided Government Hypothesis using multivariate analyses. While the bivariate analyses of the Divided Government Hypothesis in Part III.C is valuable for its simplicity and ease of interpretation, the multivariate analyses improve on the simple tests of statistical significance by controlling for more variables, permitting a more complex evaluation of the Divided Government Hypothesis. Here too, we do not find sustained support for this hypothesis. Instead, the probability that agencies will have indicia of independence is affected, in a far wider set of circumstances, by the approval rating of the President, the size of the Senate majority, and whether this majority is of the same party as the President.

I. UNDERSTANDING THE EMPIRICAL LITERATURE

This Part analyzes the empirical design and the results of the Lewis study. We show why it does not provide support for the Divided Government Hypothesis discussed in the legal literature.

A. Dependent Variables

Lewis studied five different structural features of agency, which he took to be indicative of insulation from the President: “location,” “independence,” “commission,” “fixed terms,” and “limitations on

appointments.”

With respect to the first feature, “location,” Lewis defines five categories, ordered by reference to increasing levels of insulation: Executive Office of the President, cabinet departments, independent agencies, independent commissions, and government corporations or other entities. According to Lewis, Congress can choose “to place new agencies outside the Executive Office of the President or cabinet as a way of shielding the agencies from presidential influence.”

Importantly, because it might be part of the source of the confusion in the legal literature, what Lewis calls “independent agencies” are not agencies headed by individuals with removal protection. Instead, he places in this category agencies like the National Aeronautics and Space Administration and the Small Business Administration because they reside outside of cabinet departments, even though their heads can be removed at will by the President. And, his category of “independent commissions” is also not defined by reference to the removal provision. Instead, agencies are placed in this category if they have multiple heads.

The second feature, “independence” in the Lewis study is coded affirmatively for agencies that are established with no layers of bureaucratic organization above them. What he calls “independent agencies” under this criterion “are immune to the pressures and larger policy goals of executive departments that threaten administrative agencies.” For example, he notes that agencies placed outside of cabinet departments can lobby the Office of Management and Budget and the White House directly. Again, this definition of “independence” is unrelated to the existence of removal protection provisions.

“Commission,” the third feature, refers to agencies that are governed by more than one director or agency head. Lewis notes that “[g]overnance by a board or commission insulates new agencies from presidential control by increasing the number of actors who must be influenced to change the direction of an agency.”

“Fixed terms” refers to provisions that specify the length of time that an agency head will serve in that role. According to Lewis, “political appointees who serve for fixed terms are insulated from presidential control since they cannot be removed without cause.” So, Lewis equates “fixed terms” to agency heads that serve for a fixed length of time.

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46 See LEWIS, supra note 6, at 44-49, 59.
47 See id. at 45.
48 See id.
49 See id.
50 Datla & Revesz, supra note 1, at 786.
51 See LEWIS, supra note 6, at 46-47.
52 See id. at 46.
53 See id.
54 See id.
55 See id.
56 See id.
57 See id.
58 See id. at 47.
59 See id.
terms” with removal protection. But, as we show in the next section, these characteristics are not coextensive.

Finally, “limitations on appointments” refers to provisions requiring the President to consider only individuals with certain attributes, such as political party affiliation, occupation, or experience. As Lewis notes, provisions of this sort “are a means of limiting presidential discretion.”

Notably, as indicated above, Lewis does not directly study the determinants of removal protection, the feature to which the legal literature attaches paramount importance. Additionally, Lewis does not test other features of agency structure that the legal literature recognizes as important. Indeed, of the seven indicia of independence recognized as significant, Lewis tests only three: specified tenure, multimember structure, and partisan balance requirements. He does not test litigation authority, bypass authority, and adjudication authority.

B. Relationship Between Fixed Terms and Removal Protection

Because Lewis did not code removal protection, we do not use his dataset to present the overlap between fixed terms and removal protection and thereby assess his claim that fixed terms imply removal protection. Instead, we examined this overlap in the dataset, described in Part II below, that we constructed for this Article. The relationship between these two indicia is shown in Table 1.

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59 See id.
60 See id.
61 See supra text accompanying notes 12 and 13.
63 After cleaning the Lewis dataset, we independently researched each agency to determine whether it was established with removal protection. Prior to conducting the analysis, we eliminated the following agencies from the dataset because we determined they were judicial in nature: the United States Court of Appeals for the Armed Forces, the Judicial Panel on Multidistrict Litigation, the Temporary Emergency Court of Appeals, the United States Court of Appeals for the Federal Circuit, the United States Court of Veterans Appeals, and the Federal Judicial Center. We also eliminated the Congressional Research Service, the Cost Accounting Standards Board, the Office of Technology Assessment, and the Congressional Budget Office as legislative agencies. The following agencies were eliminated because we were unable to make a determination as to whether the agencies had removal protection or not: the Rural Development Administration, the Technology Administration, and the Office of Technology Policy. The relationship between removal protection and specified tenure in Lewis’s dataset was similar to the relationship in our dataset that we present infra. A total of 113 agencies had neither removal protection or specified tenure; 40 had specified tenure but not removal protection, 13 had removal protection and specified tenure; and 1 had removal protection but not specified tenure. In Lewis’s dataset, therefore, only 25% of the agencies with specified tenure also had removal protection.
Table 1: Relationship between Specified Tenure and Removal Protection

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The table shows that out of 48 agencies with specified tenure, 29 have no removal protection and only 19 have such provisions. So, in only approximately 40% of the agencies with specified tenure is there a statutory removal protection provision.

This pattern raises serious questions about Lewis’s treatment of removal protection and fixed terms as equivalent. Obviously, Congress regards these two characteristics as different, as evidence by the fact that, for agencies with specified terms, Congress gives removal protection to some but not in others.

Moreover, the extensive Supreme Court jurisprudence on this issue has not treated these two indicia of independence as coextensive. Back in the nineteenth century, the Court held, in Parsons v. United States, that the President could remove a district attorney at will under a statute that specified a four-year term and was silent on removal. The Court interpreted the fixed term as providing an upper limit rather than a mandatory tenure. Thus, while the district attorney could not remain in office past the four-year term, this term did not guarantee the individual four years of service.

In Wiener v. United States, the Supreme Court did infer the existence of a removal protection provision under a statute that specified a fixed term but was silent on removal. But the holding in that case was very limited. Wiener had been appointed to the War Claims Commission, established after World War II to adjudicate compensation claims brought by “internees, prisoners of war, and religious organizations . . . who suffered personal injury or property damage at the hands of the enemy in connection with World War II.” The statute provided that the Commission “was to wind up its affairs not later than three years after the

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64 For a detailed discussion of the period between 1926 and 1935, see infra text accompanying notes 156-166.
65 167 U.S. 324 (1897).
66 See id. at 343.
67 See id. at 342.
69 Id. at 350.
expiration of the time for filing claims,” but did not specify a removal provision for the Commissioners.70

President Eisenhower removed Wiener before the end of the Commission’s term without specifying a “cause” related to Wiener’s work. Instead, he took the position that Wiener could be removed at will: “I regard it as in the national interest to complete the administration of the War Claims Act of 1948, as amended, with personnel of my own selection.”71 The Court ruled in favor of Weiner’s back pay claim,72 but did not do so on the basis of a broad rule under which removal protection would be inferred from statutory silence on removal coupled with a fixed term. Instead, according to the Court, “[t]he most reliable factor for drawing an inference” from the statutory silence on removal “the nature of the function that Congress vested in the . . . Commission.”73 On the basis of this principle, it held that as a result of the “intrinsic judicial character of the task” carried out by the Commission,74 it must be “inferred that Congress did not wish to have hang over the Commission the Damocles' sword of removal by the President for no reason other than that he preferred to have on that Commission men of his own choosing.”75

Recently, in Free Enterprise Fund v. Public Company Accounting Oversight Bd. (PCAOB),76 the Supreme Court grappled with the status of the Securities and Exchange Commission (SEC), another agency operating under a statute that grants its heads fixed terms but is silent on their removal.77 The SEC is like the War Claims Commission in that it has adjudicatory authority,78 but unlike it in that it also has rulemaking and enforcement authority.79 At issue in the case was the constitutionality of the removal provision for members of PCAOB, an agency established to regulate the accounting industry. These members are appointed by the SEC for five-year terms and can be removed by the SEC only “for good cause shown.”80 The Court assumed that SEC commissioners had removal protection because neither party argued otherwise,81 but it did not decide the issue.82 As a result, it struck down the removal provision for PCAOB

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70 Id.
71 Id.
72 See id. at 349.
73 Id. at 353.
74 Id. at 355.
75 Id. at 355.
76 561 U.S. 477 (2010).
77 See Datla & Revesz, supra note 1, at 790.
78 Weiner, 167 U.S. at 354-55 (“The Commission was established as an adjudicating body.”); see Adrian Vermeule, Conventions of Agency Independence, 113 COLUM. L. REV. 1163, 1211 (2013) (referring to “the strictly adjudicative functions of the War Claims Commission”).
79 See M. Elizabeth Magill, Agency Choice of Policymaking Form, 71 U. CHI. L. REV. 1383, 1384 (2004) (“The SEC is thus authorized to take one of four paths to address the transaction with which it is concerned: legislative rule, administrative adjudication, judicial enforcement, or guidance.”).
80 See PCAOB, 561 U.S. at 484-86.
81 See id. at 487.
82 See id. at 545 (Breyer, J., dissenting).
members, finding the “double removal protection” scheme to be constitutionally infirm.83

Justice Breyer, in a dissent joined by Justices Stevens, Ginsburg, and Sotomayor, questioned why the Court did not to rule on whether SEC commissioners enjoyed removal protection, since without it there would have been only one layer of for cause removal protection and thus no constitutional defect.84 Justice Breyer also suggested that statutory silence should imply that SEC commissioners are removable at will.85

The Supreme Court returned to this issue last year in DOT v. Association of American Railroads.86 Amtrak board members operate pursuant to a statute that gives them five-year terms, but the relevant statute is silent on their removal.87 In 2008, Congress authorized Amtrak and the Federal Railroad Administration to jointly issue standards on freight activity.88 The respondent in the case sought to invalidate the resulting standards by arguing that Amtrak was a private entity and therefore that it was unconstitutional to allow it to exercise such authority.89 Rejecting this challenge, the Court decided that Amtrak should be treated as “governmental entity,” in part because, in a memorandum by the Office of Legal Counsel, “[t]he Executive Branch has concluded that all appointed Board members are removable by the President without cause.”90 This memorandum distinguished Amtrak from the War Claims Commission: “[Amtrak] runs a business; it is not an adjudicatory body. Consequently, there is no ground for inferring any tenure protection . . . under the reasoning of Wiener.”91

The academic consensus is that statutory silence on removal protection implies no removal protection except in the very narrow set of cases in which the agency has exclusively adjudicatory functions. Adrian Vermeule best expresses the current state of the law: “[A]bsent either express for-cause tenure protection in the relevant statute . . . or an agency modeled on the Article III judiciary . . . , agency officials are dischargeable at will by the President.”92 Similarly, according to Peter Strauss, “in the absence of a statutory provision limiting removals . . . officers of the executive branch serve at will.”93 Focusing more narrowly on situations where the statute is silent on removal but contains a fixed term, Neomi Rao writes that “[p]roperly understood,” statutory terms “do not impose a legal

83 See id. at 495-96 (majority opinion).
84 See id. at 545-46 (Breyer, J., dissenting).
85 See id. at 546.
88 See DOT v. Ass’n of Am. R.R., 135 S. Ct. at 1229.
89 See id. at 1228.
90 Id. at 1231; see id. at 1232.
91 Id.
92 See Vermeule, supra note 78, at 1174.
93 See Peter L. Strauss, Overseer, or “The Decider”? The President in Administrative Law, 75 GEO. WASH. L. REV. 696, 716 (2007).
restriction on removal at will by the President.” Kirti Datla and Richard Revesz likewise argue that statutory silence should not be interpreted as akin to for cause removal protection.

In summary, Lewis decision to treat term limits as equivalent to removal protection is inconsistent with both the Supreme Court’s jurisprudence and the academic literature. Some of these authorities came after the publication of the Lewis study. But, nonetheless, it would be highly misleading now to conclude that the empirical results for specified tenure are also relevant to removal protection.

C. Independent Variables

Lewis’ primary objective was to examine the hypothesis that during periods of divided government there is a higher probability that a new agency will have indicia of independence. His most important independent variable is, therefore, “Divided Government,” which is coded as 1 if the Presidents and the majorities of the House and Senate are not controlled by the same party, and as 0 otherwise.

Lewis also hypothesizes that “the ability of the majority to insulate during periods of divided government depends upon the strength of the majority.” He means that a majority opposed to the President would be more likely to obtain insulating features for a new agency if it is large rather than small. A corollary is that when the majority is aligned with the President, such insulating features are less likely to result when this majority is large as opposed to small. Indeed, the premise for his analysis is that the party opposed to the President would want to insulate a new agency from presidential control and that its ability to succeed would be a function of both its size and whether it enjoys majority status.

Consistent with this narrative, Lewis uses, as an independent variable, an interaction term of Divided Government and Majority Strength to test whether majority strength has a different effect when government is divided as opposed to unified. As Lewis notes, this interaction term “should be positive, indicating that measures of majority strength increase the probability that a new agency will be insulated during periods of divided government.”

Lewis, however, implements this concept in a way that does not permit him to study to test whether the probability of granting insulating characteristics to a new agency is a function of the strength in Congress of the party opposed to the President. As his proxy for majority strength, he uses the size of the majority in the House of Representatives, but does not

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94 See Rao, supra note 62, at 1252-53.
95 See Datla & Revesz, supra note 1, at 832.
96 See LEWIS, supra note 6, at 49.
97 See id. at 55.
98 Id.
99 Id. at 56.
control for the size of the majority in the Senate. Yet there is no obvious reason why the size of the majority in the Senate would not matter as much as the size of the majority in the House of Representatives.

More importantly, by using the size of the majority of the House of Representatives as his proxy for majority strength, Lewis muddles the variable interacting Divided Government and Majority Strength by lumping together two very distinct forms of government composition: periods when the House majority party and the President are aligned (but the Senate is controlled by a different party) with periods in which the House majority party and the President are not aligned. To the extent that, as Lewis hypothesizes, the party opposed to the President seeks to insulate agencies from Presidential control, one would expect that the size of the House majority would have opposite effects in these two situations.

Lewis’ choice of interaction term gives rise to two serious problems. The first is that he is not actually testing the hypothesis concerning the impact on insulating characteristics of the size in Congress of the party opposed to the President. And, second, by lumping together two situations in which the results are likely to point in different directions, Lewis runs the risk of neutralizing the effect he seeks to study, whatever that effect might be.

D. Results

Leaving aside these design issues, Lewis’ results are not what the legal academic literature reads them to be. As noted above, in the legal literature, Lewis’ work is generally understood as providing the empirical support for the proposition that agencies established during periods of divided government are more likely to have attributes of independence. But Lewis’ empirical study actually shows the opposite. For each of his dependent variables, the coefficient on Divided Government is negative and statistically significant. Thus, as Lewis himself acknowledges, this result “appears to indicate that agencies are less likely to be insulated during periods of divided government, contrary to expectations.” And, this result is precisely the opposite of what the legal literature generally attributes to Lewis.

Lewis goes on to say that “[c]are is necessary in interpreting these coefficients in isolation from the interaction effects.” The variable interacting Divided Government and Majority Strength is, for most of the dependent variables, positive and statistically significant, indicating, as Lewis notes “that agencies are more likely to be insulated in divided government when the majority is large.” Thus, the proper way to interpret Lewis’ result is not that agencies established during divided government...

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100 See id. at 56.
101 See id. at 59.
102 See id. at 58.
103 See id. at 58-60.
104 See id. at 60.
government are more likely to have insulating characteristics than they are when government is unified. In fact, Lewis’ results support the opposite proposition. Instead, what Lewis’ results support is the altogether different claim that agencies established during periods of divided government are more likely to have insulating characteristics when the congressional majorities are large rather than small.\footnote{Lewis’ work also supports the proposition that agencies established during periods of unified government are less likely to have insulating characteristics when the congressional majorities are large rather than small. See \textit{id.} at 60.}

To further understand the role of divided government in Lewis’ dataset, we ascertained what size of a House majority would be large enough for an agency to be more likely to have insulating characteristics under divided government than under unified government. Three results are noteworthy. First, for Lewis’ “Commission” variable, the effect of divided government always decreases the probability that an agency would have insulating characteristics. There is no size of the House majority at which the overall effect of divided government increases the probability that Congress will establish an agency with a commission structure.

Second, for three of Lewis’ dependent variables, under a sufficiently large House majority, an agency established under divided government would be more likely to have insulating characteristics than one established under unified government. But the majority necessary to produce this effect is larger than the size of the any majority in the past hundred years.\footnote{We conducted a marginal effects analysis on the estimations run in the Lewis study to roughly estimate the size of the majority in the House of Representatives that would be necessary to make the “Divided Government” variable have an overall positive effect in each of the estimations. First, setting the other independent variables at their means, we determined the effect that an increase in the House majority by one percentage unit would have on the likelihood that Congress would establish an agency with each indicia of independence. Since the House majority size variable was entered into the dataset as a percentage of the members of the House of Representatives, a one-unit increase in this variable corresponds to an increase in the majority size of the House of Representatives of one percent of the total members of the House of Representatives at that time. For each estimation, we then compared the two coefficients that are necessary to determine the total effect of divided government on the insulating features tested by Lewis—the negative coefficient on the “Divided Government” variable and the positive coefficient on the interaction term for majority size times divided government. We applied the marginal effects result we obtained in the first step of the analysis to roughly approximate the size of the increase in the House of Representatives required for the overall effect of the “Divided Government” variable in each estimation to turn from negative to positive.}\footnote{For the “Location” estimation, the effect of divided government on whether Congress establishes an agency one category further removed from the President is negative whenever the size of the majority (number of members in the majority party minus number of all other members) is less than 61.9\% of the total number of the representatives in the House of Representatives.}\footnote{For the “Fixed Terms” estimation, the effect of divided government on whether Congress establishes an agency with a head that has specified tenure is negative whenever the size of the majority (number of members in the majority party minus number of all other members) is less than 66.7\% of the total number of the representatives in the House of Representatives.}\footnote{For the “Limitations on Appointments” estimation, the effect of divided government on whether Congress establishes an agency with limitations on the president’s appointment of the agency head is negative whenever the size of the majority (number of members in the majority party minus number of all other members) is less than 66.7\% of the total number of the representatives in the House of Representatives.}\footnote{For the “Limitations on Appointments” estimation, the effect of divided government on whether Congress establishes an agency with limitations on the president’s appointment of the agency head is negative whenever the size of the majority (number of members in the majority party minus number of all other members) is less than 66.7\% of the total number of the representatives in the House of Representatives.} For the “location,” “fixed terms,” and “limitations on appointments,” the majority party in House would need to be 353,\footnote{For the “Location” estimation, the effect of divided government on whether Congress establishes an agency one category further removed from the President is negative whenever the size of the majority (number of members in the majority party minus number of all other members) is less than 61.9\% of the total number of the representatives in the House of Representatives.} 363,\footnote{For the “Fixed Terms” estimation, the effect of divided government on whether Congress establishes an agency with a head that has specified tenure is negative whenever the size of the majority (number of members in the majority party minus number of all other members) is less than 66.7\% of the total number of the representatives in the House of Representatives.} and 382 seats.\footnote{For the “Limitations on Appointments” estimation, the effect of divided government on whether Congress establishes an agency with limitations on the president’s appointment of the agency head is negative whenever the size of the majority (number of members in the majority party minus number of all other members) is less than 66.7\% of the total number of the representatives in the House of Representatives.}
respectively for divided government to produce the effect consistent with the Divided Government Hypothesis discussed in the legal literature. In contrast, over the last 100 years, the majority party in the House has never had more than 334 seats.¹⁰

Third, it is only for the “independence” variable that a plausible House majority would lead divided government to increase the probability that an agency would get insulating characteristics. The majority party would need to hold at least 234 seats¹¹—a condition that the Republican Party has satisfied in the last three Congresses.¹² But recall that, as explained above, the “independence” variable is not what the legal literature equates with independent agencies: it does not depend on removal protection but on whether the agency has another bureaucratic organization above it.

II. OUR DATASET

To study the characteristics that lead to the establishment of independent agencies, we created a new dataset containing information about agencies in the modern U.S. administrative state. Our source was the U.S. Government Manual, which Lewis also used,¹³ and which provides authoritative and comprehensive information on the agencies of the federal government.¹⁴ The manual is divided into seven categories, but, for reasons discussed below,¹⁵ we focused our attention to only two: “Executive Branch: Departments” and “Executive Branch: Independent Agencies and Government Corporations.” Our dataset starts with agencies that were established beginning in 1887, when the creation of the Interstate Commerce Commission gave birth to the administrative state,¹⁶ and ends

¹¹ For the “Independence” estimation, the effect of divided government on whether Congress establishes an agency without any bureaucracy above it is negative whenever the size of the majority is less than 7.4% of the total number of the representatives in the House of Representatives.
¹³ See LEWIS, supra note 6, at 172.
¹⁵ See infra text accompanying notes 125-129.
with agencies established in 2015. To determine the agencies then in existence, we used the 2015 version of the manual.

We excluded the five agencies established before 1887: the Departments of Treasury, State, Justice, Agriculture, and Interior. Additionally, because we seek to explain features about the current administrative state, we did not include in our dataset agencies that were eliminated prior to 2015 and therefore were not listed in the 2015 U.S. Government Manual, such as the Indian Claims Commission, which was established in 1946 and eliminated in 1976.

Following the approach taken by Kirti Datla and Richard Revesz, we excluded from our dataset agencies that are not insulated from bureaucratic organization above them. We considered an agency to be insulated from a bureaucratic organization above it if it had no layers of organization above it or, in the case of sub-agencies with a layer of organization above it, if Congress granted the heads of those sub-agencies protection against removal by the President.

We did so for two reasons. First, the independence of agencies with bureaucratic organization above them is influenced both by their relationship to the hierarchy within their organization and their relationship with the President. Excluding such subagencies yields a dataset that allows for a uniform comparison of agencies whose independence is not affected by the hierarchy within their organization. Second, it is not clear that agencies embedded within a hierarchy are conceptually different from divisions of an agency that lack a separate name. For example, the Assistant Secretary of the Interior for Land and Minerals Management supervises four Interior Department agencies: the Bureau of Land Management, the Bureau of Ocean Energy Management, the Bureau of Safety and Environmental Enforcement, and the Office of Surface Mining, Reclamation and Enforcement. The relationship between this Assistant Secretary and the heads of the agencies that report to her may well be quite similar to that of the Associate Attorney General and the heads of the Antitrust and Civil Rights Divisions of the Department of Justice, which report to him. And the same may well be true with respect to the relationship between the Associate Attorney General and the heads of the

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117 A study seeking to explain features about every agency Congress has ever established, or to explain why Congress eliminates certain agencies, would require a different dataset. Those studies would be interesting and important projects but are outside the scope of this Article.
118 See Datla & Revesz, supra note 1, at 784 n.29.
119 The two subagencies that in our dataset that are protected against removal by the President are the Federal Energy Regulatory Commission in the Department of Energy and the Surface Transportation Board in the Department of Transportation.
120 Examining questions about the extent to which subagencies are independent from bureaucratic organization above them is outside the scope of this Article.
Office of Violence Against Women and the Office of Justice Programs, which are subagencies that also report to him.123

Our dataset contains a total of 73 agencies. We discuss below the seven indicia of independence that form the basis for our empirical work.124 Only 15 agencies in our dataset lack any indicia of independence.

This Article studies agencies that carry out rulemaking, adjudicatory, or enforcement functions because those agencies are the focus of administrative law.125 In contrast, agencies that provide only advice to one of the branches are engaged in conceptually different work and are outside of the scope of standard administrative law doctrines, particularly doctrines relating to the constitutional status of administrative agencies. For example, in Buckley v. Valeo,126 the Supreme Court noted: “Insofar as the powers confided in the Commission are essentially of an investigative and informative nature, falling in the same general category as those powers which Congress might delegate to one of its own committees, there can be no question that the Commission as presently constituted may exercise them.”127 But it added, in sharp contrast, that “when we go beyond this type of authority to the more substantial powers exercised by the Commission, we reach a different result. The Commission’s enforcement power, exemplified by its discretionary power to seek judicial relief, is authority that cannot possibly be regarded as merely in aid of the legislative function of Congress.”128

As a result, we did not include in our dataset agencies from the five remaining categories of U.S. Government Manual.129 Most of the agencies in “Executive Branch: The President,” such as the Council of Economic Advisers, the Domestic Policy Council, the National Economic Council, and the Office of Science and Technology Policy provide advice to the President. “Quasi-Official Agencies,” includes cultural institutions such as

123 See id.
124 See infra text accompanying notes 140-147 (discussing the seven indicia of independence that are the studied in this Article).
125 See Adrian Vermeule, Contra Nemo Iudex in Sua Cause: The Limits of Impartiality, 122 YALE L.J. 384, 388 (2012).
127 Id. at 137.
128 Id. at 138.
129 Following Datla & Revesz, we included in our dataset four commonly known agencies from a list of “Boards, Commissions, and Committees” that are “not listed elsewhere in the Manual”: the Advisory Council on Historic Preservation, the Chemical Safety Hazard Investigation Board, and the National Council on Disability. See Boards, Commissions, and Committees, THE U.S. GOVERNMENT MANUAL, http://www.usgovernmentmanual.gov/ReadLibraryItem.ashx?SFN=+FG8vUAP++X7mtXAlvTS/Q==&SF=VhJnRoeEAnGaa/rk/JOg==. See also Datla & Revesz, supra note 1, at 784 n.90. However, we did not include the other three agencies from other categories of the U.S. Government Manual that were analyzed by Datla and Revesz because each of these three agencies violated one of our decision criteria. We did not include the Panama Canal Commission because it was eliminated by Congress in 2004 and therefore not an existing agency in 2015. See Act of Sept. 30, 2004, Pub. L. 108-309, 118 Stat. 1140. We did not include the Independent Payment Advisory Board because it is advisory to Congress. Finally, we did not include the Millennium Challenge Corporation because it is a bilateral foreign aid agency.
the Smithsonian Institution and the United States Holocaust Memorial Museum. “International Organizations” includes the African Development Bank, the International Monetary Fund, the United Nations, and the World Bank. The agencies in these three categories do not typically have the rulemaking, adjudication, and enforcement functions that are the hallmarks of the administrative state and are therefore excluded from our dataset. Also excluded are “Legislative Branch” and “Judicial Branch” because agencies in those groups primarily advise and support separate branches of government.

It is possible that a few agencies in one of the five excluded categories have rulemaking, adjudication, or enforcement powers. It is also possible that some of the agencies in the two categories used for our database lack any of those responsibilities. But we did not scour the U.S. Code to make case-by-case determinations because such an inquiry would inevitably have involved questions of judgment that might have biased our sample. Instead, our decision rule was to include all agencies in the two categories that closely matched our objective and to exclude the five categories that did not.

Our dataset differs from the dataset in the Lewis study in several important ways. While our dataset contains 73 agencies established between 1887 and 2015 that remained in existence in 2015, the Lewis study includes all agencies established by statute between 1946 and 1999, regardless of whether they remained in existence at the end of this period, a total of 182 agencies. Also, Lewis began by considering agencies in all the U.S. Government Manual categories. Then, he “refined the dataset to exclude advisory, quasi-official, multilateral, and educational/research agencies and support office common to all cabinet departments.” Thus, Lewis made on a case-by-case basis an inquiry that we made categorically. The inclusion in his database of judicial bodies such as the United States Court of Appeals for the Armed Forces, the United States Court of Appeals for the Federal Circuit, and the United States Court of Veterans Appeals illustrates the perils of case-by-case determinations. Moreover, unlike us, Lewis did not exclude agencies that were housed within another bureaucratic structure. We explain above the reasons for our choices.

For each agency in our sample, we determined the year of agency creation as the first year that Congress established that agency or its first predecessor agency. Congress frequently establishes agencies that take over the functions and authorities of prior agencies, and that use personnel, facilities and other resources of prior agencies. These agencies may also carry over aspects of agency design, making the consideration of predecessor agencies essential to our study of agency design. An agency is a predecessor agency to an agency in our dataset if the agency in our dataset shared the same name as the predecessor agency, or if the new

130 See LEWIS, supra note 6, at 172-73.
131 See supra text accompanying notes 118-123.
agency took over the primary regulatory responsibilities of the predecessor agency. To determine whether the agency took over the primary regulatory responsibilities of a predecessor agency, we reviewed the website of the agency in question. If the website of the agency identified a prior agency as a predecessor agency or as an agency from which that agency took over primary regulatory responsibilities, we treated that agency as a predecessor agency.

Consider the example of the Federal Energy Regulatory Commission (FERC). Congress established the Federal Power Commission (FPC) in 1920 with a multimember structure under the joint administration of the Secretary of War, Interior and Agriculture.\(^\text{132}\) In 1930, Congress passed a statute creating a new leadership structure for the FPC, consisting of a five-member commission with a partisan balance requirement, and with each commissioner granted a specified tenure.\(^\text{133}\) According to the FERC website, the changes in 1930 were designed to eliminate the conflicting mandates created by the prior leadership structure involving secretaries from multiple cabinet agencies.\(^\text{134}\) The Federal Power Act of 1935 and the Natural Gas Act of 1938 gave the FPC the authority to regulate the sale and transportation of electricity and natural gas.\(^\text{135}\) Amendments to the Natural Gas Act in 1940 also gave the FPC the authority to certify and regulate natural gas facilities.\(^\text{136}\) In 1977, following the OPEC oil embargo, Congress decided to reorganize the FPC as FERC, placing it in the Department of Energy.\(^\text{137}\) The statute gave FERC members statutory protection against removal, and granted FERC litigation authority and bypass authority.\(^\text{138}\)

Congress continued certain aspects of agency design from the FPC, granting FERC the same indicia of independence that had previously been granted to the FPC, including specified tenure, a multimember structure, partisan balance and adjudication authority. Applying our definition of “predecessor agency,” we treat the FPC as a predecessor agency to FERC because FERC took over the primary regulatory responsibilities of the FPC. Therefore, we set 1920 as the year of creation of the FERC in our dataset, and we coded FERC as being established with a multimember structure and adjudication authority, but not with the indicia of independence Congress granted it in later years, including partisan balance, specified tenure, removal protection, litigation authority, and bypass authority.

We collected information related to whether Congress granted each agency any of the seven structural features that we have identified as:

\(^\text{138}\) Id. § 401(b), 91 Stat. 565, 582, § 401(b) (1977) (statutory removal protection); § 401(i) (litigation authority); § 401(j) (bypass authority).
indications of independence for agencies at the time of agency creation. We follow Datla and Revesz in identifying the following indicia of independence: removal protection, specified tenure, multimember structure, partisan balance requirements, litigation authority, bypass authority, and adjudication authority.\footnote{Datla & Revesz, supra note 1, at 784-812.} We read statutes from the U.S. Statutes at Large and coded each of these variables as 1 if Congress established the agency with each indicia of independence, and 0 otherwise.\footnote{U.S. GOVERNMENT PUBLISHING OFFICE, UNITED STATES STATUTES AT LARGE, https://www.gpo.gov/fdsys/browse/collection.action?collectionCode=STATUTE}

Removal protection provisions come in various forms, but the typical removal protection requirement specifies that an official can be removed only for “inefficiency, neglect of duty or malfeasance in office.”\footnote{See, e.g., Act of Feb. 4, 1887, ch. 104, § 11, 24 Stat. 379, 383 (creating the Interstate Commerce Commission).} Specified tenure requirements provide that an agency head shall serve for a specified term of years.\footnote{See, e.g., Commodity Futures Trading Commission Act of 1974, Pub. L. 93-463, sec. 101, §2(a)(2), 88 Stat. 1389, 1389 (providing for a five-year term for each commissioner of the Commodity Futures Trading Commission).} Provisions granting agencies multimember structures create a governing body of the agency that consists of more than one member.\footnote{See id., sec. 101, § 2(a)(2) (providing for a Commodity Futures Trading Commission consisting of a chairman and four other commissioners).} Partisanship balance provisions require the President to consider the partisan affiliation of agency heads when appointing them, typically providing that no more than a certain number of the members of the governing body may be from the same political party.\footnote{See id. (providing that no more than three members of the commission may be members of the same party).} Litigation authority grants an agency some authority to represent itself in courts of law, rather than to conduct litigation exclusively through the Department of Justice.\footnote{See, e.g., Commodity Futures Trading Commission Act of 1974, Pub. L. 93-463, sec. 101, §2(a)(4), 88 Stat. 1389, 1389 (providing that the Commodity Futures Trading Commission may have a general counsel who, along with other attorneys appointed by the Commodity Futures Trading Commission, may represent the commission in courts of law whenever appropriate).} Bypass authority permits an agency to avoid centralized review of congressional testimony, legislative proposals, or budget submissions.\footnote{See id. sec. 101, § 2(a)(9)(B) (providing that whenever the Commodity Futures Trading Commission submits any budget estimate or request to the President or to the Office of Management and Budget, or any legislative recommendations, legislative testimony, or comments on legislation to the President or the Office of Management and Budget, the Commodity Futures Trading Commission shall concurrently transmit copies to House Committee on Agriculture and the Senate Committee on Agriculture and Forestry).} Adjudication authority grants an agency some authority to proceed through formal adjudication.\footnote{See id. sec. 101, § 14 (providing for a process for the Commodity Futures Trading Commission to investigate and adjudicate complaints of violations under the act).}

An implicit assumption of the analyses in this Article is that Congress considered the question of agency design at the time of agency creation and made an intentional decision about whether or not to grant each agency each of the seven indicia of independence. We did not include instances in which Congress granted an agency any indicia of independence in a year
after Congress established the agency. While including such post-creation indicia of independence would add more information to the empirical analyses, it would also create a methodological problem. We are unable to determine the years in which Congress considered granting post-creation indicia of independence to any agency but intentionally chose not to grant it. Therefore, including post-creation indicia of independence in our analyses would bias the results of the analyses by introducing affirmative instances of Congress granting indicia of independence with no corresponding negative instances of congress not granting indicia of independence. Comparing congressional decisions to grant indicia of independence only at the time of agency creation ensures a uniform comparison.

III. EMDPIRICAL EVALUATION OF THE NEW DEAL AND DIVIDED GOVERNMENT HYPOTHESES

In this Part, we begin our empirical analysis. Section A displays the distribution of agencies established each year with and without each of the seven indicia of independence, to permit a visual evaluation of the New Deal Hypothesis and the Divided Government Hypothesis. Section B turns its attention to a bivariate test of the New Deal Hypothesis. It looks at whether the difference in the percentage of agencies with each of the relevant indicia of independence established during the New Deal and at other times is statistically significant. Section C performs similar analysis of the Divided Government Hypothesis.

A. Patterns of Indicia of Independence

In each of Figures 1 through 7, the bars represent the number of agencies in our dataset established by Congress in that year. The charts show that Congress established seven agencies during the New Deal period between 1933 and 1938. Prior to that, it had established very few agencies in our dataset. After a lull, the pace of agency creation picked up after World War II. The 1960s and 1970s experienced a particularly high rate of agency creation. The rate of agency creation slowed during the Reagan administration and Clinton administrations, and remained relatively steady throughout the administrations of George W. Bush and Barack Obama.

Figures 1 through 7 show, for each of the indicia of independence on which this Article focuses, whether Congress granted an agency that form of insulation from presidential control at the time that it established the agency. The green fill in the bars indicates agencies established by Congress in a given year that were granted the specified indicator of independence in each Figure. The brown fill indicates agencies established by Congress during that year that were not granted that indicia of independence. The green and brown fill together represents the total number of agencies established in a given year. The light gray shading in the background represents periods of unified government, in which the same party controlled the presidency, the House of Representatives and the
Senate. The dark gray shadings in the background represent periods of divided government. The violet shading in the background corresponds to the years 1933-1938, the period of time known as the New Deal,\footnote{See, e.g., M.J. Heale, Franklin D. Roosevelt: The New Deal and War 77 (1999) ("The New Deal itself, as a series of economic and social reform measures, lasted only from 1933 to 1938."); Daryl J. Levinson & Richard H. Pildes, Separation of Parties, Not Powers, 119 Harv. L. Rev. 2311, 2332 (2006) ("The New Deal Democratic Party from 1933 through 1938 was united on New Deal economic legislation . . . ."); Peter Luddington-Foronjy, Overseas Intervention, the Rise of Fascism Abroad, and the Origins of World War II, in The New Deal and the Great Depression 169 (Aaron D. Purcell ed., 2014) ("Historians have divided Franklin D. Roosevelt’s presidency into two distinct periods. The first encompasses the years from 1933 through 1938 . . . which came to be known as the New Deal.").} which was a period of unified government. The background shading permits a visual evaluation of the New Deal Hypothesis and the Divided Government Hypothesis.

Patterns of Creation of Agencies with Removal Protection

\[\text{Count of Agencies Created} \]

\[\text{Year} \]

\[\text{Count of Agencies Created} \]

\[\text{Year} \]

\[\text{Count of Agencies Created} \]

\[\text{Year} \]

\[\text{Count of Agencies Created} \]

\[\text{Year} \]
As with many of the other indicia of independence, the practice of granting removal protection to agency heads is neither a new nor an obsolete practice. Figure 1 shows that three of the first five agencies established in our dataset were granted removal protection, and that the last two agencies in our dataset were granted removal protection. Figure 1 also demonstrates that the distribution of agencies across different time periods does not follow an obvious pattern. Congress established some agencies with removal protection and some without removal protection during the New Deal and across periods of divided and unified government. The period after World War II and before the 1970s is a period in which Congress did not establish any agencies with removal protection. However, this period spans both periods of unified government and periods of divided government.

Patterns of Creation of Agencies with Specified Tenure

![Graph showing patterns of creation of agencies with specified tenure across different years. The graph displays a bar chart with years on the x-axis (1920, 1950, 1980, 2010) and count of agencies created on the y-axis. The bars indicate the number of agencies created each year, with different colors representing different tenure specifications.](image-url)
Figure 2: Specified Tenure

Figure 2 shows that Congress is much more likely to grant agency heads a specified tenure than to grant them removal protection. As with grants of removal protection, grants of specified tenure do not follow a clear pattern. All seven agencies established during the New Deal were granted specified tenure, but this does not seem especially noteworthy given the frequency with which Congress grants agency heads specified tenure during other periods.

Pattern of Creation of Agencies with Multimember Structure

Figure 3: Multimember Structure

Figure 3 shows that Congress established more agencies in our dataset with a multimember structure than it established agencies with a single head. Besides the Department of Commerce, established in 1903, the
first 12 agencies in our dataset, spanning the years 1913 to 1935 and including the New Deal agencies, were all established with a multimember structure. After World War II, the distribution of the creation of agencies with and without a multimember structure remained relatively constant, spanning both periods of divided government and unified government.

![Patterns of Creation of Agencies with Partisan Balance](image)

**Figure 4: Partisan Balance**

Figure 4 shows that there are fewer grants of partisan balance requirements than grants of multimember structure because agencies with partisan balance requirements are a subset of the agencies with a multimember structure. As with the other indicia of independence, Congress established agencies with partisan balance requirements and without partisan balance requirements in periods of unified and divided government and during the New Deal.
Figure 5: Litigation Authority

Like the other indicia of independence, Figure 5 shows no obvious pattern in congressional grants of litigation authority. Congress established agencies with litigation authority and without litigation authority across all time periods, including during periods of unified government, divided government, and the New Deal.
Of the indicia of independence in our dataset, bypass authority has the most striking relationship with time. Figure 6 shows that Congress did not establish any agency in our dataset with bypass authority until 1971. However, the relationship of bypass authority with periods of unified and divided government is not clear from Figure 6. Despite limited instances of unified government after 1970, Congress still established two agencies with bypass authority during a period of unified government.

Figure 6: Bypass Authority

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149 The first example is the Farm Credit Administration, which Congress established in 1971. See Farm Credit Act of 1971, Pub. L. 92-181, § 5.18(3), 85 Stat. 583, 622.
Figure 7: Adjudication Authority

Figure 7 shows that grants of adjudication authority to agencies, like grants of other indicia of independence, do not follow an obvious pattern. Congress established agencies with adjudication authority and without adjudication authority in similar proportions during periods of unified government, divided government, and the New Deal.

B. New Deal Analysis

The New Deal Hypothesis states that Congress was more likely to establish independent agencies during the New Deal than during other time periods. Congress established the Interstate Commerce Commission

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150 See supra note 3 and accompanying text.
(ICC), the first agency commonly considered as an independent agency, decades before the New Deal in 1887.\textsuperscript{151} Congress also established the Federal Reserve System and the Federal Trade Commission, two other agencies commonly thought of as independent, before the New Deal.\textsuperscript{152} As demonstrated by Figures 1-7 above, Congress established numerous agencies with indicia of independence after the New Deal. Nonetheless, the literature makes the claim that the New Deal period was an especially robust period for the creation of independent agencies.\textsuperscript{153}

We coded every agency in our dataset established in the years 1933-1938 as “New Deal Agencies.” Table 1 lists the seven New Deal Agencies in our dataset and the indicia Congress granted to each at the time of their creation.


\textsuperscript{153} See supra note 3, and accompanying text.
Table 2: New Deal Agencies

<table>
<thead>
<tr>
<th>Agency</th>
<th>Year Created</th>
<th>Indicia of Independence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Deposit Insurance Corporation</td>
<td>1933</td>
<td>Specified Tenure, Multimember Structure, Partisan Balance, and Litigation Authority.</td>
</tr>
<tr>
<td>Tennessee Valley Authority</td>
<td>1933</td>
<td>Specified Tenure, Multimember Structure, and Litigation Authority.</td>
</tr>
<tr>
<td>Federal Communications Commission</td>
<td>1934</td>
<td>Specified Tenure, Multimember Structure, Partisan Balance, and Adjudication Authority.</td>
</tr>
<tr>
<td>Securities and Exchange Commission</td>
<td>1934</td>
<td>Specified Tenure, Multimember Structure, Partisan Balance, Litigation Authority, and Adjudication Authority.</td>
</tr>
<tr>
<td>National Labor Relations Board</td>
<td>1935</td>
<td>Removal Protection, Specified Tenure, Multimember Structure, and Adjudication Authority.</td>
</tr>
<tr>
<td>Railroad Retirement Board</td>
<td>1935</td>
<td>Specified Tenure and Multimember Structure.</td>
</tr>
</tbody>
</table>

The rest of this section presents results from a bivariate analysis that evaluates the New Deal Hypothesis. The bivariate analysis involves testing the empirical relationship between one dependent variable and one independent variable. The dependent variable, the variable we are testing to determine the extent to which it depends on the independent variable, is whether Congress granted an agency a specified indicia of independence. The independent variable, the variable we test to determine how much it explains changes in the dependent variable, is whether the agency was established during the New Deal or during another period.

The bivariate analysis tests the differences in the proportion of agencies established with a specified indicia of independence to agencies established without that indicia during the New Deal relative to the proportion of agencies established with that indicia of independence to
agencies established without that indicia of independence during other time periods to determine if the difference between the two proportions is statistically significant. We perform a bivariate analysis for each of the seven indicia of independence, except for bypass authority because Congress did not begin granting agencies bypass authority until decades after the New Deal period.

The results provide some support to the New Deal Hypothesis. Specifically, the results suggest that Congress was more likely to establish agencies with a multimember structure and specified tenures for the agency heads. The association between the time period (New Deal or otherwise) and multimember structure is statistically significant at the 5% level. The associations between time period and both litigation authority and specified tenure are significant at the 10% level. The associations between time period and removal protection, partisan balance, litigation authority and adjudication authority are not statistically significant at the 10% level. Tables 3-8 summarize the full results of our analysis.

Table 3: The New Deal and Removal Protection

<table>
<thead>
<tr>
<th>Agencies Created with Removal Protection</th>
<th>Agencies Created without Removal Protection</th>
<th>Percentage of Agencies Created with Removal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Deal</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>17</td>
<td>49</td>
</tr>
</tbody>
</table>

Two-tailed P-Value = 1

The proportion of agencies in our dataset established with removal protection during the New Deal is similar to the proportion of agencies in our dataset established with removal protection during other time periods. The difference between the two proportions is not statistically significant at the 10% level. Congress granted removal protection to around 2 out of every 7 agencies it established in our dataset.

One cautionary note, however, is in order. Justice Breyer, in his dissent in PCAOB, wrote that “Congress created the SEC at a time when, under this Court's precedents, it would have been unconstitutional to make

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154 Because the sample size of New Deal Agencies is relatively small, we ran a Fisher’s Exact Test instead of the Chi-Square test to estimate P-Values for statistical differences between the groups. We compute two-sided P-Values with the method of summing small P-Values.

155 See supra note 149 and accompanying text.

156 For further discussion of this case, see supra text accompanying notes 76-85.
the Commissioners removable only for cause.” 157 Indeed, the SEC was established between two landmark cases: Myers v. United States,158 decided on October 25, 1926, and Humphrey’s Executor v. United States,159 decided on May 27, 1935. According to Justice Breyer, the Supreme Court’s decision in Myers “cast serious doubt on the constitutionality of all ‘for cause’ removal provisions,” whereas the Court’s decision in Humphrey’s Executor, nine years later, “removed any doubt in respect to the constitutionality of making commissioners of independent agencies removable only for cause.”160

Justice Breyer suggested that Congress viewed for cause removal protection as unconstitutional during the period between Myers and Humphrey’s Executor, and therefore would not have intended to provide the SEC with this insulating feature: “Nor is the absence of a ‘for cause’ provision in the statute that created the [SEC] likely to have been inadvertent.” 161 And he noted that, during this period, “Congress created at least three major federal agencies without making any of their officers removable for cause.” 162

With respect to Justice Breyer’s implicit suggestion that Congress consciously avoided for cause removal provisions during the nine-year period between Myers and Humphrey’s Executor because of constitutional concerns, the evidence points in conflicting directions. The establishment of the NLRB supports this view. As Justice Breyer noted, “only one month after Humphrey’s Executor was decided, in establishing the National Labor Relations Board (NLRB), Congress returned to its pre-Myers practice of including such provisions in statutes creating independent commissions.”163 Justice Breyer’s view is further supported by the fact that the original bill establishing the NLRB was introduced before Humphrey’s Executor and did not include for cause removal protection,164 and that the removal provision was added to the bill after Humphrey’s Executor was decided.165 But this view is contradicted by the structure of the National Mediation Board. When Congress established this agency on

158 In Myers, the Supreme Court held that the President could remove a Postmaster at will, despite a statutory removal provision requiring the advice and consent of the Senate. See Myers v. United States, 272 U.S. 52, 176 (1926).
159 In Humphrey’s Executor, the Supreme Court held that statutory for cause removal protection of FEC commissioners was valid. See Humphrey’s Executor v. United States, 295 U.S. 602, 631-32 (1935).
161 Id. at 547.
162 Id.
165 The removal protection was added on June 10, 1935. See H.R. Rep. No. 74-1147, at 8 (1935).
June 21, 1934, one year before Humphrey’s Executor, it gave its heads removal protection.  

Table 4: The New Deal and Specified Tenure

<table>
<thead>
<tr>
<th></th>
<th>Agencies Created with Specified Tenure</th>
<th>Agencies Created without Specified Tenure</th>
<th>Percentage of Agencies Created with Specified Tenure</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Deal</td>
<td>7</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Other</td>
<td>41</td>
<td>25</td>
<td>62%</td>
</tr>
</tbody>
</table>

Two-tailed P-Value = 0.088. Statistically significant at the 10% level.

Congress granted specified tenure to the heads of agencies in our dataset established during the New Deal more frequently than it granted specified tenure to heads of agencies in our dataset established during periods other than the New Deal. The association between the New Deal and agencies established with specified tenure is statistically significant at the 10% level.

Table 5: The New Deal and Multimember Structure

<table>
<thead>
<tr>
<th></th>
<th>Agencies Created with a Multimember Structure</th>
<th>Agencies Created without a Multimember Structure</th>
<th>Percentage of Agencies Created with a Multimember Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Deal</td>
<td>7</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Other</td>
<td>33</td>
<td>33</td>
<td>50%</td>
</tr>
</tbody>
</table>

Two-tailed P-Value = 0.014. Statistically significant at the 5% level.

Congress granted all seven New Deal agencies in our dataset a multimember structure. In periods other than the New Deal, Congress only granted agencies a multimember structure half of the times it established an agency in our dataset. The difference in the proportions of agencies established with a multimember structure during the New Deal and agencies established with a multimember structure in other time periods is significant at the 5% level.

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Table 6: The New Deal and Partisan Balance

<table>
<thead>
<tr>
<th></th>
<th>Agencies Created with Partisan Balance</th>
<th>Agencies Created without Partisan Balance</th>
<th>Percentage of Agencies Created with Partisan Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>New Deal</strong></td>
<td>4</td>
<td>3</td>
<td><strong>57%</strong></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>17</td>
<td>16</td>
<td><strong>52%</strong></td>
</tr>
</tbody>
</table>

Two-tailed P-Value = 1.

Table 5 includes only agencies that were established with a multimember structure, because a multimember structure is a necessary condition for partisan balance requirements. The proportion of agencies in our dataset established with partisan balance during the New Deal is similar to the proportion of agencies in our dataset established with partisan balance during other time periods, separated by only four percentage points. The difference in the proportions is not statistically significant at the 10% level.

Table 7: The New Deal and Litigation Authority

<table>
<thead>
<tr>
<th></th>
<th>Agencies Created with Litigation Authority</th>
<th>Agencies Created without Litigation Authority</th>
<th>Percentage of Agencies Created with Litigation Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>New Deal</strong></td>
<td>3</td>
<td>4</td>
<td><strong>43%</strong></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>13</td>
<td>53</td>
<td><strong>20%</strong></td>
</tr>
</tbody>
</table>

Two-tailed P-Value = 0.173.

Congress granted litigation authority to New Deal agencies in our dataset more frequently than to agencies in our dataset established during other time periods. However, the difference in the proportions of agencies established with litigation authority during the New Deal and agencies established with litigation authority during other periods is not significant at the 10% level.
Table 8: The New Deal and Adjudication Authority

<table>
<thead>
<tr>
<th></th>
<th>Agencies Created with Adjudication Authority</th>
<th>Agencies Created without Adjudication Authority</th>
<th>Percentage of Agencies Created with Adjudication Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Deal</td>
<td>3</td>
<td>4</td>
<td>43%</td>
</tr>
<tr>
<td>Other</td>
<td>29</td>
<td>37</td>
<td>44%</td>
</tr>
</tbody>
</table>

Two-tailed P-Value = 1.

The proportion of agencies in our dataset established with adjudication authority during the New Deal is similar to the proportion of agencies in our dataset established with adjudication authority during other time periods. Congress granted adjudication authority to around 3 out of every 7 agencies it established in our dataset. The difference in the proportions is not statistically significant at the 10% level.

C. Composition of Government Analysis

The Divided Government Hypothesis is the most discussed and cited hypothesis in the legal and political science literature purporting to explain when and why Congress establishes independent agencies. In this section, we present a bivariate analysis that evaluates the Divided Government Hypothesis.

Following the approach in the Lewis study, we define a period of “unified government” as a period in which both chambers of Congress and the White House were controlled by the same political party. We define all other periods of time as a period of “divided government.” Our dataset includes 45 agencies that were established during a period of unified government and 28 agencies that were established during a period of divided government.

We tested the differences in the proportion of agencies established with a specified indicator of independence during a period of divided government relative to the proportion established without that indicator of independence during periods of unified government. The results do not provide strong support to the Divided Government Hypothesis. The association between six of the seven indicia of independence and the composition of government is not statistically significant at the 10% level.

167 The definitions of “unified government” and “divided” government that we use in this paper are consistent with how those terms are used in the Lewis study. See supra note 97 and accompanying text.

168 We use the Chi-Square test with one degree of freedom to estimate P-Values for statistical differences between the groups.
The results show that Congress was more likely to grant agencies bypass authority during a period of divided government, and the association is significant at the 10% level. Tables 9 through 15 present our results.

Table 9: Government Composition and Removal Protection

<table>
<thead>
<tr>
<th></th>
<th>Agencies Created with Removal Protection</th>
<th>Agencies Created without Removal Protection</th>
<th>Percentage of Agencies Created with Removal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divided</td>
<td>8</td>
<td>20</td>
<td>29%</td>
</tr>
<tr>
<td>Unified</td>
<td>11</td>
<td>34</td>
<td>24%</td>
</tr>
</tbody>
</table>

Two-tailed P-Value = 0.696.

Based on the bivariate analysis, government composition does not seem to affect whether Congress granted agencies in our dataset removal protection. The proportion of agencies in our dataset established with removal protection during divided government is similar to the proportion of agencies in our dataset established with removal protection during other time periods. The difference between the two time periods is not statistically significant at the 10% level.

Table 10: Government Composition and Specified Tenure

<table>
<thead>
<tr>
<th></th>
<th>Agencies Created with Specified Tenure</th>
<th>Agencies Created without Specified Tenure</th>
<th>Percentage of Agencies Created with Specified Tenure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divided</td>
<td>18</td>
<td>10</td>
<td>64%</td>
</tr>
<tr>
<td>Unified</td>
<td>30</td>
<td>15</td>
<td>67%</td>
</tr>
</tbody>
</table>

Two-tailed P-Value = 0.835.

Congress granted specified tenure to agencies established during unified government and agencies established during divided government in similar proportions. The difference in the proportions is not statistically significant at the 10% level.
**Table 11: Government Composition and Multimember Structure**

<table>
<thead>
<tr>
<th></th>
<th>Agencies Created with a Multimember Structure</th>
<th>Agencies Created without a Multimember Structure</th>
<th>Percentage of Agencies Created with Multimember Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divided</td>
<td>17</td>
<td>11</td>
<td>61%</td>
</tr>
<tr>
<td>Unified</td>
<td>23</td>
<td>22</td>
<td>51%</td>
</tr>
</tbody>
</table>

Two-tailed P-Value = 0.423.

Congress granted a multimember structure to agencies in our dataset established during divided government more frequently than to agencies established during unified government. However, the difference in the proportions is not statistically significant at the 10% level.

**Table 12: Government Composition and Partisan Balance**

<table>
<thead>
<tr>
<th></th>
<th>Agencies Created with Partisan Balance</th>
<th>Agencies Created without Partisan Balance</th>
<th>Percentage of Agencies Created with Partisan Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divided</td>
<td>9</td>
<td>8</td>
<td>53%</td>
</tr>
<tr>
<td>Unified</td>
<td>12</td>
<td>11</td>
<td>52%</td>
</tr>
</tbody>
</table>

Two-tailed P-Value = 0.9617.

The bivariate analysis for partisan balance presented here only includes agencies that were established with a multimember structure because a multimember structure is a necessary condition for Congress to grant partisan balance. Congress established agencies in our dataset with partisan balance just over half of the time during both unified and divided government. The difference between the two time periods is not statistically significant at the 10% level.
Table 13: Government Composition and Litigation Authority

<table>
<thead>
<tr>
<th></th>
<th>Agencies Created with Litigation Authority</th>
<th>Agencies established Without Litigation Authority</th>
<th>Percentage of Agencies Created with Litigation Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divided</td>
<td>8</td>
<td>20</td>
<td>29%</td>
</tr>
<tr>
<td>Unified</td>
<td>8</td>
<td>37</td>
<td>18%</td>
</tr>
</tbody>
</table>

Two-tailed P-Value = 0.278.

Based on the bivariate analysis, the composition of government does not appear to affect Congress’s decision to grant agencies litigation authority. Congress granted agencies established during divided government litigation authority more frequently than agencies established during unified government, but the difference between the two is not statistically significant at the 10% level.

Table 14: Government Composition and Bypass Authority

<table>
<thead>
<tr>
<th></th>
<th>Agencies Created with Bypass Authority</th>
<th>Agencies Created without Bypass Authority</th>
<th>Percentage of Agencies Created with Bypass Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divided</td>
<td>10</td>
<td>12</td>
<td>46%</td>
</tr>
<tr>
<td>Unified</td>
<td>2</td>
<td>13</td>
<td>13%</td>
</tr>
</tbody>
</table>

Two-tailed P-Value = 0.0727. Statistically significant at the 10% level.

The bivariate analysis for bypass authority includes only agencies established after 1970 because Congress did not grant any agency bypass authority until 1971. Congress granted bypass authority to agencies in this subset of our dataset established during divided government more frequently than to agencies in this subset of our dataset established during unified government. The difference in the proportions is statistically significant at the 10% level.

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169 Because of the low number of observations of agencies established with bypass authority during a period of unified government, we used a Fisher’s Exact Test to estimate P-Values for statistical differences between the groups.

170 See supra note 149 and accompanying text.
Congress established a greater proportion of agencies in our dataset with adjudication authority during periods of divided government relative to agencies established with adjudication authority during periods of unified government. However, the difference in the proportions is not statistically significant at the 10% level.

IV. EXPLORING THE POSSIBLE EXPLANATIONS FOR INDEPENDENT AGENCY CREATION

We estimated probit models for each of the seven indicia that we have identified as features associated with independent agencies: statutory removal protection, specified tenure, multimember structure, partisan balance requirements, litigation authority, bypass authority and adjudication authority. A probit model is an estimation in which the dependent variable can take only one of two values. In this case, the dependent variable takes on the value of 1 if Congress established the agency with a designated indicator of independence and 0 otherwise. The probit estimations presented below test the extent to which the controls included in the estimations explain when Congress established agencies with indicia of independence. The multivariate analyses presented below allow for an evaluation of the Divided Government Hypothesis. We do not test the New Deal Hypothesis with a multivariate analysis because of the limited number of New Deal agencies in our dataset.

<table>
<thead>
<tr>
<th></th>
<th>Agencies Created with Adjudication Authority</th>
<th>Agencies Created without Adjudication Authority</th>
<th>Percentage of Agencies Created with Adjudication Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divided</td>
<td>15</td>
<td>13</td>
<td>54%</td>
</tr>
<tr>
<td>Unified</td>
<td>17</td>
<td>28</td>
<td>38%</td>
</tr>
</tbody>
</table>

Two-tailed P-Value = 0.186.

See supra note 139-147 and accompanying text.

The sample of seven New Deal agencies is a small number of observations on which to regress our dependent variables. None of these seven observations has presidential approval rating associated with it because our presidential approval rating data only goes back to 1945. Moreover, each of the seven agencies was established during a period of unified government. Because of the small number of observations and the limited variation in the relevant independent variables, a multivariate analysis of the New Deal would produce limited results.
The Divided Government Hypothesis states that the composition of government at the time of an agency’s establishment is important in determining whether that agency receives indicia of independence. We control for divided government in the estimations that we present below by including an indicator variable that is equal to 1 for agencies established during a period of divided government and equal to 0 for agencies established during a period of unified government. We also control for other variables related to the composition of government that may make it more or less likely that Congress will grant agencies indicia of independence.

A larger majority size in both or either chamber of Congress may make it easier for one party to impose its goals related to agency design. Therefore, we include controls for the size of the House majority and the size of the Senate majority. Finally, a popular President may be more able to work with Congress to design agencies that are in line with his or her preferences than a less popular President. Therefore, in the second specification including all agencies for which we have presidential approval data, we control for the approval rating of the President at the time of agency creation.

Including controls for divided government, the size of the House majority, and the approval rating of the President is consistent the Lewis study. In our multivariate analyses, we also include a control for the size of the Senate majority, a variable that may plausibly have equal or more significance as the size of the House majority variable. The interaction term for which we choose to control marks another difference from the Lewis study. While the Lewis study interacts the divided government variable with the variable indicating the size of the House majority, we interact the majority size variables for each of the chambers with a variable indicating whether the majority party of that chamber is aligned with the President, because Lewis’ approach does not properly control for whether the House majority is aligned with the President.

The theory predicts that the effect of the majority size in each chamber of Congress should depend on whether the majority party in each chamber
is from the same political party as the President. Therefore, we interact each of the House and Senate majority size variables with a variable that is set at 1 if the respective majority party is aligned with the President and 0 otherwise. The interaction terms (CA*H. Maj. and CA*S. Maj. in Tables 16 and 17) create a distinction between the effect of an increase in the size of the majority of each chamber of Congress during a period of time when the President’s political party is aligned with the political party controlling that chamber and during a period of time when the President president’s political party is not aligned with the political party controlling that chamber. This distinction, which Lewis had not made, is important because, to the extent that the size of the majority party in each chamber affects decisions to grant indicia of independence, the effects of a change in the majority in each chamber when the President is aligned with that chamber relative to when the President is not aligned with that chamber should move in opposite directions. An interaction term between the size of the majorities in each chamber of Congress and a variable indicating whether the government is unified or divided would not pick up this distinction, but the chamber alignment variables do.

We do not include the indicator variables denoting whether the House and Senate respectively are aligned with the President as stand-alone controls in each of the estimations, and instead include a control for whether the government is unified or divided. The primary reason for this approach is because we want to test the Divided Government Hypothesis, since it has been the predominant hypothesis in the academic literature, and including a control for divided government is the most straightforward way to do so. Periods of Senate alignment with the President or House alignment with the President are not coextensive with divided government because the fact that one chamber is aligned sheds no light on the alignment of the other chamber, so including the divided government variable is essential to testing the Divided Government Hypothesis. An ancillary reason that we did not include the chamber alignment of both the House of Representatives and the Senate as stand-alone controls is that these variables are highly correlated with each other. Including both in the model would introduce significant multicollinearity and reduce the statistical power of the estimations. Nonetheless, a control for divided

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181 See supra text accompanying notes 11, 99, and 100.
182 See supra text accompanying notes 99-100.
183 The indicator variables for chamber alignment of the House of Representatives and chamber alignment of the Senate share a correlation coefficient of 0.826.
184 One approach to test for divided government that we considered was to include stand-alone controls for the chamber alignment variables for the House of Representatives and for the Senate and an additional interaction term between the chamber alignment variables for the House of Representatives and for the Senate. Under this approach, the interaction between the chamber alignment terms for the House of Majorities and the Senate would equal 1 during a period of divided government (as we have defined it throughout this Article and as defined in the Lewis study), and 0 otherwise. However, because the chamber alignment variables for the House and Senate are so highly correlated, this approach would exacerbate deficiencies arising from multicollinearity and would result in a model containing a number of independent variables that exceeds best practices given the size of our dataset.
government is a good proxy for both alignment of the House and alignment of the Senate.  

One objective way to test whether including a control for divided government rather than controls for both the alignment of the House of Representatives and Senate are better overall models is by running estimations for each of our dependent variables using both specifications and comparing the Akaike Information Criteria (AIC) for each estimation across the two specifications. AIC are a measure of the relative quality of estimations for the same data. The AIC results provide an objective means for comparing the overall quality of two estimations by weighing the trade-off between fitting the models and using too many controls. A lower AIC indicates a superior model. All but two out of the thirteen estimations in the specification using a control for divided government had lower AIC than models that included stand-alone controls for chamber alignment of the House of Representatives and the Senate. This analysis supports our choice of variables.

We present results for each indicia of independence for two separate specifications. The first specification uses all agencies in our dataset and includes controls for the composition of government. The second specification uses all agencies in our dataset established in 1945 or later, and includes controls for the composition of government and presidential approval. We present both specifications because there is no presidential approval data for agencies in our dataset established before 1945. We present the first specification because we want to present results that include estimations done on a dataset including the New Deal agencies and other agencies established before 1945. We present the second specification because we want to control for presidential approval rating in our analysis of the Divided Government Hypothesis.

Among the agencies used in the second specification, only 6 out of 60 observations do not have the same values for chamber alignment of the House of Representatives and divided government. Only 7 out of 60 observations do not have the same values for chamber alignment of the Senate and divided government. These 6 and 7 observations make the terms interacting the majority sizes of each chamber and the chamber alignment variables imperfect predictors because the interaction terms may pick up some of the main effects that are due to the effect of chamber alignment on its own (independent of the interaction term) and that are not controlled for through the divided government variable. Even though its interpretation changes slightly, the interaction term is still unbiased. The interpretation of each other variable is standard, and the interaction terms are the only variable whose interpretation is affected by this approach.

The AIC for the estimations using chamber alignment of the House of Representatives and Senate as independent controls in the first specification are (1) 90.88 (removal protection), (2) 96.55 (specified tenure), (3) 103.9 (multimember), (4) 94.48 (partisan balance), (5) 74.41 (litigation authority), (6) 104.7 (adjudication authority). The AIC for the estimations replacing chamber alignment of the House of Representatives and Senate as independent controls with a single control for divided government are (1) 89.22 (removal protection), (2) 96.06 (specified tenure), (3) 101.74 (multimember), (4) 93.1 (partisan balance), (5) 74.41 (litigation authority), (6) 103.03 (adjudication authority). We present results from the first specification in which we do not control for presidential approval rating in this footnote, but we performed the same analysis on the second specification and found that, similar to the results for the first specification, the specification using divided government as a control had lower AIC for each of the estimations except for partisan balance.
A. Multivariate Analysis of the Divided Government Hypothesis

Table 16 presents our results for the first specification. The columns in Table 16 correspond to the estimations related to the following dependent variables: (1) removal protection, (2) specified tenure, (3) multimember structure, (4) partisan balance requirements,\textsuperscript{187} (5) litigation authority, and (6) adjudication authority.\textsuperscript{188}

\textsuperscript{187} Unlike our approach in the bivariate analyses, we do not eliminate agencies without a multimember structure from the dataset before running the partisan balance estimation. We do not eliminate these agencies because the resulting dataset would have few observations remaining, and the statistical power of the estimation on such a limited number of observations would be limited. Since a multimember structure is a necessary condition for partisan balance requirements, the partisan balance estimations presented below should therefore be interpreted as a combination of the two features. The partisan balance estimations compare the likelihood that Congress will establish agencies with a multimember structure and partisan balance requirements relative to all other agencies (including agencies with a single head and agencies with a multimember structure but no partisan balance requirements). This interpretation should be distinguished from the interpretation in the bivariate analyses, which tests the difference in the proportions of agencies with a multimember structure that are established with partisan balance requirements and the proportions of agencies with a multimember structure that are established without partisan balance requirements.

\textsuperscript{188} We do not present an estimation for bypass authority in the first specification. The main reason that we present two specifications is that we only have approval rating for agencies in our dataset established in 1945 or later. However, all of the agencies established with bypass authority were established in 1971 or later. Because we have presidential approval rating associated with each agency in our dataset established with bypass authority, we only present a bypass authority estimation using the second specification.
Table 16: Multivariate Results for the First Specification

Probit Results for the First Specification

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divided</td>
<td>-0.14</td>
<td>0.35</td>
<td>0.32</td>
<td>-0.18</td>
<td>0.56</td>
<td>0.27</td>
</tr>
<tr>
<td></td>
<td>(0.92)</td>
<td>(0.80)</td>
<td>(0.80)</td>
<td>(0.89)</td>
<td>(0.96)</td>
<td>(0.80)</td>
</tr>
<tr>
<td>H. Maj.</td>
<td>-0.003</td>
<td>0.001</td>
<td>-0.001</td>
<td>-0.01</td>
<td>-0.02</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.02)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>S. Maj.</td>
<td>0.08</td>
<td>0.07</td>
<td>0.09*</td>
<td>0.11**</td>
<td>0.13*</td>
<td>0.09*</td>
</tr>
<tr>
<td></td>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.06)</td>
<td>(0.07)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>CA+H. Maj.</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.03*</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.02)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>CA+S. Maj.</td>
<td>-0.12**</td>
<td>-0.08*</td>
<td>-0.11**</td>
<td>-0.13**</td>
<td>-0.18**</td>
<td>-0.12**</td>
</tr>
<tr>
<td></td>
<td>(0.06)</td>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.06)</td>
<td>(0.07)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.99*</td>
<td>-0.50</td>
<td>-0.66</td>
<td>-0.84</td>
<td>-1.40**</td>
<td>-0.10</td>
</tr>
<tr>
<td></td>
<td>(0.55)</td>
<td>(0.50)</td>
<td>(0.50)</td>
<td>(0.53)</td>
<td>(0.66)</td>
<td>(0.49)</td>
</tr>
</tbody>
</table>

*Significant at the 10% level.
**Significant at the 5% level.

The size of the Senate majority plays an important role in determining whether an agency is granted many of the indicia of independence.\(^{189}\) The coefficient for Senate Majority (S. Maj.) in each of the estimations is positive, indicating that when the Senate is not aligned with the presidency, an increase in the size of majority party is associated with an increased probability that the agency will have the specified indicia of independence. For the multimember, partisan balance, and adjudication authority estimations, the association is significant at the 10% level. For the litigation authority estimation, the association is significant at the 5% level. The coefficient for the term interacting the size of the Senate majority with the Senate alignment variable is negative and significant in all six estimations: at the 10% level for the specified tenure estimation and at the 5% level for the other estimations.

The coefficients presented in Table 16 do not have any meaningful interpretation apart from the direction of the effect and an indication of

\(^{189}\) The interaction term between the alignment of the House of Representatives with the President and the size of the majority of the House of Representatives (CA*H. Maj.) is significant at the 10% level for the litigation authority estimation. However, we do not discuss this result further because this interaction term is not significant in any of the other 12 estimations that we run, and this result may therefore be random. Additionally, the House of Representatives majority size variable (H. Maj.) is significant at the 10% level for the adjudication authority estimation, but is not significant for any of the other 12 estimations that we run. We also do not discuss this result further for the same reason.
whether the coefficient is significant or not. To explain these results more fully, we conducted a marginal effects analysis for the variables with significant results to demonstrate what the model indicates is the effect of a one-unit increase in the independent variable of interest on the outcome of whether Congress grants an agency a given indicia of independence when the other independent variables are set at their means. Each of the marginal effects that we present below for both Specifications One and Two follow this analysis.

The marginal effects indicated in Table 17 for the Senate majority term represent the effect of an increase in the Senate majority size of one Senator during a time when the Senate is not aligned with the President on the probability that Congress would establish an agency with the specified indicia of independence when the other independent variables are set at their means. For example, an increase in the size of the Senate majority by one Senator during a period when the Senate is not aligned with the President and all other independent variables are set at their means increases the probability that Congress will establish an agency with a multimember structure by 3.2%.

The marginal effects indicated for the Senate majority size and chamber alignment interaction term represent the difference between the effect of the size of the Senate majority when the Senate is aligned with the President and the effect of the size of the Senate majority when the Senate is not aligned with the President. For example, an increase in the size of the Senate majority by one Senator during a period when the Senate is aligned with the President decreases the probability that Congress will establish an agency with removal protection by 3.4% relative to a period when the Senate is not aligned with the President. The Combination column combines the marginal effects of the Senate majority variable and the interaction term to isolate the effect of an increase in the Senate majority during a period when the Senate is aligned with the President. This column may be interpreted, for example, as saying that the effect of an increase in the size of the Senate majority by one Senator during a period when the Senate is aligned with the President decreases the probability that Congress will establish an agency with removal protection by 1.0%. Note that, while the effects of the combination terms are not significant (they are statistically indistinguishable from 0), the difference between the two periods (represented by the interaction term) is significant in each of the estimations in the first specification.
Table 17: Senate Majority Size Marginal Effects Analysis for the First Specification

<table>
<thead>
<tr>
<th>Variable</th>
<th>Senate Major Variable</th>
<th>Chamber Alignment and Senate Majority</th>
<th>Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removal Protection</td>
<td>2.5%</td>
<td>-3.4%**</td>
<td>-1.0%</td>
</tr>
<tr>
<td>Specified Tenure</td>
<td>2.1%</td>
<td>-2.7%*</td>
<td>-0.5%</td>
</tr>
<tr>
<td>Multimember</td>
<td>3.2%*</td>
<td>-4.0%**</td>
<td>-0.8%</td>
</tr>
<tr>
<td>Partisan Balance</td>
<td>3.6%*</td>
<td>-4.1%**</td>
<td>-0.5%</td>
</tr>
<tr>
<td>Litigation Authority</td>
<td>3.2%*</td>
<td>-4.5%**</td>
<td>-1.3%</td>
</tr>
<tr>
<td>Adjudication Authority</td>
<td>3.1%*</td>
<td>-4.3%**</td>
<td>-1.2%</td>
</tr>
</tbody>
</table>

*Significant at the 10% level.
**Significant at the 5% level.

B. Multivariate Analysis Controlling for Presidential Approval

The second specification contains all of the controls contained in the first specification, but it also adds a control for the approval rating of the president at the time the agency was established. Because we were unable to obtain presidential approval before the year 1945, the estimations run using the second specification include agencies established only in 1945 or later. The columns in Table 17 correspond to the estimations related to the following dependent variables: (1) removal protection, (2) specified tenure, (3) multimember structure, (4) partisan balance requirements, (5) litigation authority, (6) bypass authority, and (7) adjudication authority. Relative to the first specification, the second specification has two major differences. First, the second specification controls for the approval rating of the president at the time of agency creation. Additionally, the second specification contains a smaller sample size of agencies, starting in 1945, when approval ratings first became available.

190 See supra note 178 and accompanying text and the text following supra note 186. There are a total of 60 agencies for which we have approval rating data.
191 Unlike our approach in the bivariate analyses, we do not eliminate agencies without a multimember structure from the dataset before running the partisan balance estimation. See supra note 187.
With respect to the bypass authority estimation, we use a partitioned dataset that includes only agencies in our dataset established after 1970, the year prior to which Congress first granted any agency bypass authority. Driving the unique treatment for bypass authority was the observation that Congress did not grant bypass authority to any agency until 1971. While Congress could have theoretically granted agencies bypass authority prior to 1971, we reasoned that Congresses prior to 1971 most likely were not seriously deliberating whether or not to grant bypass authority to agencies. To the extent that Congresses did not debate or even consider bypass authority to be a possibility for earlier agencies in our dataset, including such agencies in the sample would bias the results of the estimation. We chose 1970 as the cutoff year for agencies in our dataset due to its status as the first year prior to which Congress granted such authority. All the agencies that are used as observations in our bypass authority estimation were established after 1970, and we have presidential approval rating associated with each of these agencies. Because the rationale for running the first specification—that we do not have presidential approval rating for agencies established before 1945—does not apply to the bypass authority estimation, we do not present results for a bypass authority estimation under the first specification and instead only present results for a bypass authority estimation under the second specification. Table 17 presents the results from the second specification for each of the seven indicia of independence.

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There were 37 agencies established in 1970 or later in our dataset.
Table 18: Multivariate Results for the Second Specification

Probit Results for the Second Specification
============================================================================================================
<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divided</td>
<td>2.04*</td>
<td>-0.06</td>
<td>-0.68</td>
<td>-0.45</td>
<td>-0.07</td>
<td>2.01</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>(1.12)</td>
<td>(0.62)</td>
<td>(0.66)</td>
<td>(0.77)</td>
<td>(0.81)</td>
<td>(1.37)</td>
<td>(0.64)</td>
</tr>
<tr>
<td>Approval</td>
<td>-6.58**</td>
<td>-2.19</td>
<td>-0.89</td>
<td>0.39</td>
<td>-2.33</td>
<td>-5.87*</td>
<td>-2.44</td>
</tr>
<tr>
<td></td>
<td>(2.67)</td>
<td>(1.78)</td>
<td>(1.77)</td>
<td>(2.08)</td>
<td>(2.29)</td>
<td>(3.23)</td>
<td>(1.79)</td>
</tr>
<tr>
<td>H. Maj.</td>
<td>-0.01</td>
<td>0.001</td>
<td>0.001</td>
<td>-0.004</td>
<td>-0.02</td>
<td>-0.01</td>
<td>-0.02*</td>
</tr>
<tr>
<td></td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>S. Maj.</td>
<td>0.10*</td>
<td>0.09*</td>
<td>0.13***</td>
<td>0.13**</td>
<td>0.15**</td>
<td>-0.04</td>
<td>0.13**</td>
</tr>
<tr>
<td></td>
<td>(0.06)</td>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.06)</td>
<td>(0.06)</td>
<td>(0.07)</td>
<td>(0.06)</td>
</tr>
<tr>
<td>CA*H. Maj.</td>
<td>0.03</td>
<td>0.001</td>
<td>-0.005</td>
<td>-0.002</td>
<td>0.002</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>CA*S. Maj.</td>
<td>-0.13*</td>
<td>-0.07</td>
<td>-0.11**</td>
<td>-0.10*</td>
<td>-0.09</td>
<td>0.03</td>
<td>-0.11*</td>
</tr>
<tr>
<td></td>
<td>(0.07)</td>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.06)</td>
<td>(0.07)</td>
<td>(0.10)</td>
<td>(0.06)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.37</td>
<td>0.90</td>
<td>0.22</td>
<td>-1.30</td>
<td>0.19</td>
<td>1.58</td>
<td>1.23</td>
</tr>
<tr>
<td></td>
<td>(1.33)</td>
<td>(1.04)</td>
<td>(1.03)</td>
<td>(1.27)</td>
<td>(1.27)</td>
<td>(2.08)</td>
<td>(1.05)</td>
</tr>
</tbody>
</table>
============================================================================================================

*Significant at the 10% level.
**Significant at the 5% level.
***Significant at the 1% level.

In this specification, which controls for the presidential approval rating, the composition of the Senate remains important. In the multimember estimation, the Senate majority variable is positive and significant for six of the seven estimations: at the 1% level for multimember structure; at the 5% level for partisan balance, litigation authority, and adjudication authority; and at the 10% level for removal protection and specified tenure. In all cases, a larger Senate majority when the Senate is not aligned with the President increases the probability that Congress would establish an agency with each of the relevant indicia of independence.

The interaction term between the Senate alignment and Senate majority size is significant at the 10% level for the removal protection, partisan balance, and adjudication authority estimations, and at the 5% level for the multimember structure estimation, indicating that Congress is less likely to grant these features to agencies when the Senate is aligned with the President relative to when the Senate is not aligned. These results are consistent with the results from the first specification, and significant to an even greater degree for many of the variables. The approval rating of the
President is also significant at the 5% level for the removal protection estimation and at the 10% level for the bypass authority estimation.

Table 19 presents a marginal effects numbers for the Senate majority size variables in the second specification, calculated in the same way as described above for the first specification. The interpretation of Table 19 is identical to the interpretation of Table 17. Therefore, for example, an increase in the size of the Senate majority of one Senator during a time when the Senate is not aligned with the President and all other independent variables are set at their means increases the probability that Congress would establish an agency with removal protection by 2.3%. An increase in the size of the Senate majority by one Senator during a period when the Senate is aligned with the President decreases the probability that Congress would establish an agency with removal protection by 3.1% relative to a period when the Senate is not aligned with the President. And an increase in the size of the Senate majority by one Senator during a period when the Senate is aligned with the President decreases the probability that Congress would establish an agency with removal protection by 0.8%.
## Table 19: Senate Majority Size Marginal Effects Analysis for the Second Specification

<table>
<thead>
<tr>
<th>Variable</th>
<th>Senate Major Variable</th>
<th>Chamber Alignment and Senate Majority</th>
<th>Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removal Protection</td>
<td>2.3%*</td>
<td>-3.1%*</td>
<td>-0.8%</td>
</tr>
<tr>
<td>Specified Tenure</td>
<td>3.0%*</td>
<td>-2.3%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Multimember</td>
<td>4.6%***</td>
<td>-3.8%**</td>
<td>0.8%</td>
</tr>
<tr>
<td>Partisan Balance</td>
<td>3.5%**</td>
<td>-2.7%*</td>
<td>0.8%</td>
</tr>
<tr>
<td>Litigation Authority</td>
<td>3.3%**</td>
<td>-1.9%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Bypass Authority</td>
<td>-1.1%</td>
<td>0.9%</td>
<td>-0.2%</td>
</tr>
<tr>
<td>Adjudication Authority</td>
<td>4.2%**</td>
<td>-3.7%*</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

*Significant at the 10% level.  
**Significant at the 5% level.  
***Significant at the 1% level.

We conducted a marginal effects analysis for the approval rating variable as well, and found that, when the other independent variables are set at their means, an increase in the approval rating of the President by 1% is associated with a 1.5% decreased probability that Congress would establish an agency with removal protection. An increase in the approval rating of the President by 1% when the other independent variables are set at their means is associated with a 1.2% decreased probability that Congress would establish an agency with bypass authority.

Out of the 13 estimations we conducted (six for the first specification and seven for the second), divided government is statistically significant, and then only at the 10% level, in only one: the removal protection estimation in the second specification. According to our marginal effects analysis, a period of divided government increases the probability that Congress would establish an agency with removal protection by nearly 48% relative to a period of unified government. At a minimum, our results indicate that divided government does not appear to be important in determining when Congress establishes agencies with
specified tenure, a multimember structure, partisan balance, litigation authority, bypass authority and adjudication authority.

While the divided government variable is significant at the 10% level in the removal protection estimation in the second specification, it is not, significant for the removal protection estimation in the first specification. There are two interpretations for this difference, and we have no way to distinguish which is the right interpretation or what combination of the two interpretations best explains the difference. The first interpretation is that divided government is not significant with respect to whether Congress establishes agencies with removal protection when viewed across a longer time frame that included agencies established before 1945. The second interpretation is that divided government is significant with respect to whether Congress established agencies with removal protection, but the first specification misses this result because it does not control for the approval rating of the President.

To the extent that our results support the Divided Government Hypothesis in a limited subset of instances, they provide nuance to the Hypothesis by suggesting that it primarily works through a channel not previously emphasized: the alignment of the political parties in the Senate and the White House. When the Senate majority party is not aligned with the President, Congress is more likely to establish agencies with certain indicia of independence. When the Senate majority party is aligned with the President, our results predict that Congress is less likely to establish agencies with indicia of independence. Importantly, the estimations predict that the alignment of the Senate with the presidency is important regardless of whether the majority party of the House of Representatives is aligned with the majority party in the Senate and the party of the President (unified government), or whether the majority party of the House of Representatives is not the same party as either the President or the Senate or both (divided government). Moreover, our results suggest that the majority size and alignment of the House of Representatives does not have a significant effect on whether an agency is granted any indicia of independence, regardless of whether government is unified or divided.

Part of the explanation for the importance of the Senate majority party relative to the composition of the House majority for the purposes of whether Congress grants agencies indicia of independence at the time of their creation may be the filibuster rule in the Senate. The filibuster makes it easier for the minority party to block votes on the creation of agencies entirely, and to increase the political costs associated with those votes that do occur.193 Our results, however, do not suggest that the filibuster rule is

193 A cloture vote, necessary to end a filibuster, requires a three-fifths majority and does not immediately end debate. Rather it limits further debate to 30 hours. Standing Rules of the Senate (revised to January 24, 2013), Rule XXII(2). A Senator can place a hold on a motion, implying the threat to filibuster, and this is often “sufficient to prevent a measure from coming to the Senate floor.” See Richard S. Beth & Valeria Heitshusen, Congressional Research Service, Filibusters and Cloture in the Senate 21-22. See generally GREGORY KOGER, FIBLUSTERING: A
the only interpretation for the importance of the majority party of the Senate relative to the majority party of the House of Representatives. Some other factor or factors might also contribute to the Senate’s importance in determining whether agencies are granted indicia of independence, including the unique distribution of representatives to the population established by the fact that each state sends exactly two representatives to the Senate. Further inquiry on this matter could be fruitful.

C. Unexplained Factors

The sections above presented results showing a statistical relationship between certain independent variables and indicia of independence. Presidential approval, the Senate majority, and the alignment of the Senate all exhibit associations in our model with respect to whether Congress established agencies with certain indicia of independence that are significant in at least some instances at the 10% or at the 5% level. However, we have yet to present any information related to the magnitude of those effects. This section addresses these questions by discussing the goodness of fit of the estimations we present above. The goodness of fit analysis explains how much of the outcome (Congress establishing agencies with indicia of independence) is explained in our model by the independent variables for which we control (including presidential approval rating and the size and alignment of the Senate majority), and how much is explained by other factors for which we did not control.

We note that the results of the goodness of fit analysis do not affect the results we have already presented. Even if the models do not explain a significant amount of the difference in the outcomes, it does not mean that the estimation is uninformative. The results still present the statistical relationship between the indicia of independence and the independent variables. An independent variable that has a statistically significant relationship with a dependent variable still exerts an effect on the dependent variable under the model that cannot be explained by randomness alone, even if the effect is not very large, or does not completely explain when Congress establishes independent agencies.

We analyzed two goodness of fit measures for each estimation run using the second specification. The first goodness of fit measure, the McFadden Pseudo R-Square, attempts to approximate for a probit estimation the R-Square measure associated with ordinary least squares estimations. An R-Square value for an ordinary least square estimation is the fraction of the total variance in the outcomes that is explained by the

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194 Ordinary least squares estimations are calculated to minimize the variance of the observations. Probit estimations are maximum likelihood estimates arrived at through an iterative process. A consequence of the differences in the construction of ordinary least squares estimations and probit estimations is that the R-Square measure commonly reported with ordinary least squares estimations cannot be precisely replicated for probit estimations.
estimation. Visually, R-Square can be thought of as a measure of how close the plotted data are to the fitted estimation lines. The McFadden Pseudo R-Square can also be interpreted as a measure of the sample variation in the dependent variables that is explained by the independent variables.\textsuperscript{195} A McFadden Pseudo R-Square of 100\% means that the model explains all the variation in the data. A McFadden Pseudo R-Square of 0\% means that the model explains none of the variation in the data.

The second measure of goodness of fit compares each estimation model with a null model. A null model is a model with no independent variables and only an intercept line to fit the data. Then, it asks if the difference in the fit of the two models is statistically significant.\textsuperscript{196} We present goodness of fit results for the second specification in Table 20. We ran an identical goodness of fit analysis for the first specification and the numbers were similar.

\textsuperscript{195} While the R-Square measure for an ordinary least squares estimation may be interpreted as the precise fraction of the variation in the dependent variable explained by the independent variables in the estimation, the McFadden Pseudo R-Square measure takes on a more nuanced interpretation. The McFadden Pseudo R-Square is constructed by dividing the log likelihood value for the fitted model (the estimation being tested) by the log likelihood value for the null model (a model with no independent variable and only an intercept predictor). Daniel L. McFadden, the researcher who developed the McFadden Pseudo R-Square measure stated that "][t]hose unfamiliar with [McFadden Pseudo R-Square] should be forewarned that its values tend to be considerably lower than those of the [R-Square] index . . . For example, values of 0.2 to 0.4 for [McFadden Pseudo R-Square] represent excellent fit." Daniel L. McFadden, \textit{Quantitative Methods for Analyzing Travel Behaviour on Individuals: Some Recent Developments}, in \textit{Behavioural Travel Modeling} 306 (David Hensher & Peter Stopher eds., 1979).

\textsuperscript{196} The Chi-Square value associated with each of the comparisons between the estimations and the null model has 6 degrees of freedom.
Table 20: Goodness of Fit Analysis for the Second Specification

<table>
<thead>
<tr>
<th>Estimation</th>
<th>McFadden Pseudo R-Square of Estimation</th>
<th>Comparison with Null Model: Chi-Square</th>
<th>Comparison with Null Model: P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removal Protection</td>
<td>0.23</td>
<td>15.02</td>
<td>0.020**</td>
</tr>
<tr>
<td>Specified Tenure</td>
<td>0.081</td>
<td>6.47</td>
<td>0.372</td>
</tr>
<tr>
<td>Multimember</td>
<td>0.130</td>
<td>10.79</td>
<td>0.095*</td>
</tr>
<tr>
<td>Partisan Balance</td>
<td>0.132</td>
<td>8.63</td>
<td>0.260</td>
</tr>
<tr>
<td>Litigation Authority</td>
<td>0.195</td>
<td>11.14</td>
<td>0.084*</td>
</tr>
<tr>
<td>Bypass Authority</td>
<td>0.185</td>
<td>8.32</td>
<td>0.216</td>
</tr>
<tr>
<td>Adjudication Authority</td>
<td>0.132</td>
<td>10.74</td>
<td>0.097*</td>
</tr>
</tbody>
</table>

*Fits significantly better than the null model at the 10% level.
**Fits significantly better than the null model at the 5% level.

We interpret these McFadden Pseudo R-Square measures to indicate that each of the estimations only explain a relatively small fraction of the instances in which Congress grants each indicator of independence. For our variables, the McFadden Pseudo R-Square measures range from 0.081 to 0.23, with removal protection having the highest value. Even for the removal protection, litigation authority, and bypass authority estimations in which the McFadden Pseudo R-Square measures are relatively high, the results indicate that the estimations provide only a partial explanation of when Congress grants indicia of independence to agencies.

The goodness of fit is statistically different from a null model for the removal protection, multimember structure, litigation authority, and adjudication authority estimations, at the 5% level for removal protection and at the 10% level for the others. But it is not statistically different from a null model for the remaining variables. We also interpret these goodness of fit measures, to suggest that the estimations we present explain only a small part of when Congress establishes agencies with indicia of independence,
particularly with respect to the specified tenure, partisan balance and bypass authority estimations. Unobserved factors for which we do not control account for the majority of the variation in our dataset related to when Congress grants indicia of independence to some agencies and not to other agencies.

In light of the goodness of fit findings in relation to our own study, we analyzed the goodness of fit of the estimations presented in the Lewis study, the primary empirical support for the Divided Government Hypothesis. The Lewis study did not present information specifying the extent to which the tested independent variables account for the differences in outcomes of when agencies are established with the insulating features tested in that study. Therefore, readers could not determine if the independent variables presented—and most significantly, divided government—explain all the differences in the outcomes of agency creation with insulating features, or whether other unexplained factors explain some of the difference in outcomes. As noted above, the goodness of fit measures for estimations do not call into question the relationships of statistical significance identified, and therefore do not affect interpretations of statistical significance in the Lewis study. However, by failing to present information about the extent to which other factors might be important in explaining the outcomes about when agencies are established with insulating features, the Lewis study may have unintentionally overstated the importance of the explanatory factors it presented.

We ran the same two goodness of fit tests that we present above on our own results to determine the goodness of fit for each of the estimations run in the Lewis study. Table 18 presents goodness of fit results for the ordinary probit estimations run in the Lewis study.197

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197 The Chi-Square value associated with each of the comparisons between the estimations and the null model has 7 degrees of freedom.
Table 21: Goodness of Fit Analysis for Select Estimations from the Lewis Study

<table>
<thead>
<tr>
<th>Estimation</th>
<th>McFadden Pseudo R-Square of Estimation</th>
<th>Comparison with Null Model: Chi-Square</th>
<th>Comparison with Null Model: P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commission</td>
<td>0.047</td>
<td>9.980</td>
<td>0.190</td>
</tr>
<tr>
<td>Fixed Terms</td>
<td>0.094</td>
<td>18.758</td>
<td>0.009***</td>
</tr>
<tr>
<td>Independence</td>
<td>0.081</td>
<td>18.486</td>
<td>0.009***</td>
</tr>
<tr>
<td>Limitations on Appointments</td>
<td>0.082</td>
<td>18.261</td>
<td>0.011**</td>
</tr>
</tbody>
</table>

**Fits significantly better than the null model at the 5% level.

***Fits significantly better than the null model at the 1% level.

The McFadden Pseudo R-Squares of less than 0.1 for each of the estimations tested indicate that each estimation only explains a small fraction of the instances in which Congress created agencies with each insulating feature. Other factors for which the Lewis study did not control account for most of the variation in the outcomes of the when Congress established agencies with the tested insulating features. The McFadden Pseudo R-Squares are generally lower for the estimations in the Lewis study relative to the McFadden Pseudo R-Squares for the estimations we present in this Article. The fixed terms, independence, and limitations on appointments estimations are each statistically different than the null model, at the 1% level for the first two and at the 5% level for the third. The estimations in the Lewis study generally improve on the null model more significantly than our estimations do, likely due to the larger sample size used in the Lewis study.

Conclusion

Our Article advances the understanding of independent agencies in five significant ways. First, we show that the legal literature’s embrace of the Divided Government Hypothesis was based on a misunderstanding of the underlying empirical work, which in fact provided more support for the opposite proposition.

Second, studying the interplay between divided government and the size of the House majority, as the dominant political science study had done, conflates two very different divided government scenarios: the case in which the House is aligned with the President (with the Senate controlled by the other party) and the case in which the House is not
aligned with the President. Because the theory predicts that the party not aligned with the President would want to impose insulating conditions on administrative agencies, the effect of a larger House majority should depend on whether that majority is aligned with the President. By conflating these two disparate scenarios, the results are likely to neutralize themselves and their interpretation is therefore likely to be compromised. Also, by focusing on the House and not the Senate, the dominant political science study overlooked the possibility that the impact of the two chambers might be different.

Third, by properly controlling for whether both the Senate and the House majorities are aligned with the President, we find that the most significant factors predicting whether an agency will be vested with indicia of independence are the approval rating of the President and the size and alignment of the Senate majority. In contrast, the size and alignment of the House majority do not have a statistically significant effect.

Fourth, the identification of statistically significant variables should be the starting point, and not the ending point, of the analysis. It is then important to determine how much of the pattern of agency creation these variables explain, an inquiry that the dominant political science study had not performed. These statistically significant variables—in both that study and in ours—explain relatively little of this variation. To best understand the full picture, quantitative empirical studies of this sort should be coupled with detailed case studies. The unusual budgetary independence of the CFPB, almost certainly attributable to Warren’s zealous advocacy, suggests that the identification of policy entrepreneurs and the tracing of their influence is a promising focus for such studies.

Fifth, the empirical findings support the challenges to the binary view that places agencies in distinct executive and independent categories. In doing so, they have significant doctrinal implications and support a broad assertion of presidential power in areas that have important policy consequences.