Rulemaking Ossification Is Real:  
A Response to *Testing the Ossification Thesis*¹

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ABSTRACT

This Article responds to *Testing the Ossification Thesis*, in which Professors Jason Yackee and Susan Yackee engage in an empirical study and claim to find relatively weak evidence that ossification is either a serious or widespread problem. This Response asserts that nothing in the Yackees’ study contradicts or undermines the ossification hypothesis. Ossification is a real problem that has a wide variety of serious adverse effects. It must be understood so that we can effectively discuss potential means through which we can enhance the efficacy and efficiency of regulation by federal agencies. This Response reviews the methodology of the Yackees’ study, the dataset relied upon, and the time period used, and suggests what would be appropriate normative criteria in such a study.

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**Introduction**

Many scholars have long maintained that the process of issuing rules through the use of the notice and comment procedure described in § 553 of the Administrative Procedure Act² has become “ossified.”³ By this they mean that it takes a long time and an extensive commitment of agency resources to use the notice and comment process to issue a rule.⁴ Proponents of the ossification hypothesis identify many


³ The Yackees cite many of the scholars who have discussed the ossification hypothesis.

⁴ See *id.* at 1417–18.
adverse effects of this ossification of the rulemaking process.\(^5\) Most of these proponents attribute the ossification of the rulemaking process primarily to the courts, with secondary roles for Congress and the White House.\(^6\)

In *Testing the Ossification Thesis*, Professors Jason Yackee and Susan Yackee engage in an empirical study in which they conclude “evidence that ossification is either a serious or widespread problem is mixed and relatively weak.”\(^7\) The purpose of this Response is to persuade the reader that nothing in the Yackees’ study contradicts or undermines the ossification hypothesis. Ossification is a real problem that has a wide variety of serious adverse effects. It must be understood so that we can effectively discuss potential means through which we can enhance the efficacy and efficiency of regulation by federal agencies.

Before I begin that task, however, I need to state several important caveats. First, I do not enter this discussion as a neutral observer. Like virtually all experienced administrative law scholars, I long ago accepted the ossification hypothesis as true and important.\(^8\) The hypothesis is supported by a large body of evidence.\(^9\) Second, I want to distinguish my criticism of the Yackees’ finding from my views of the Yackees’ article as scholarship. The article and the study are impressive. I have no doubt that the data the Yackees gathered and analyzed will be useful for other purposes even though the data do not support their finding. Third, one of the reasons I admire the Yackees’ study as scholarship is the Yackees’ candid recognition of their study’s limits. Anyone who reads the article with care will find recognition of each of the criticisms and limitations I am about to describe.\(^10\) Finally, the main reason why the Yackees’ study does not support their finding is because the Yackees misunderstand the ossification hypothesis. That misunderstanding is at least partly attributable to the tendency of proponents of the hypothesis to describe it in language that is misleading. I admit to indulging that tendency with some frequency, as demonstrated by my overly broad description of the hypothesis in the first

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\(^5\) See id. at 1432–36 & nn.102–21.

\(^6\) Id. at 1425–26.

\(^7\) Id. at 1421.


\(^9\) The Yackees cite some of that evidence, though they discount it as anecdotal. Yackee & Yackee, *supra* note 1, at 1422.

\(^10\) E.g., id. at 1477–82.
Like all participants in discussions of complicated phenomena, the proponents of the ossification hypothesis often use short-hand terms like “rulemaking ossification” to refer to a phenomenon that can be more accurately characterized as ossification of rulemaking in the context of proposed rules that create or reflect high stakes controversies.

I. THE METHODOLOGY OF THE STUDY

The Yackees created and analyzed a massive dataset in their effort to test the ossification hypothesis. They identified 2718 rules that the Department of the Interior (“DOI”) issued through use of the notice and comment procedure between 1950 and 1990. They then determined the time between issuance of the Notice of Proposed Rulemaking (“NPRM”) and issuance of each of the final rules. Finally, they compared the average time between the issuance of the NPRM and the issuance of the final rule during two periods—1950 to 1975 and 1976 to 1990. The Yackees found only a relatively small difference between the average time required to issue a rule during the first and second periods. They also found that “agencies promulgated the majority of rules in our dataset within one year and the vast majority within two years.” The Yackees relied primarily on those two specific findings to support their broader conclusion that ossification is neither a serious nor a widespread problem.

There are many reasons why the Yackees’ specific findings do not support their broad conclusion. First, by looking only at the time between issuance of the NPRM and issuance of the final rule, they understate significantly the total time needed to issue a rule through the notice and comment procedure. The issuance of an NPRM begins the formal part of the rulemaking process, but it typically follows a long period in which the agency devotes a great deal of time and attention to the difficult process of drafting an NPRM that has a reasonable prospect of surviving the inevitable challenges to its adequacy in a review proceeding. Every time I teach administrative law, I first introduce my students to some of the many opinions in which courts have

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11 See supra text accompanying notes 3–6.
12 Yackee & Yackee, supra note 1, at 1445.
13 Id. at 1454–55.
14 Id.
15 Id. at 1456.
16 Id. at 1458.
17 See id. at 1457–58.
18 See, e.g., Pierce, supra note 8, at 65.
rejected NPRMs as inadequate. I then ask them to imagine that they have been given the task of heading the agency team that is assigned to draft an NPRM that has a good chance of surviving judicial review in a major rulemaking. They quickly conclude that the task is extremely difficult, and that their team will need to devote thousands of hours to drafting an NPRM that is likely to be hundreds of pages long.

Few studies attempt to determine the total length of the rulemaking process, including the pre-NPRM period, for the same reason the Yankees did not attempt to make that determination with respect to the 2718 rulemakings in their dataset—determining when an agency began the pre-NPRM part of the rulemaking procedure is a difficult and time-consuming process. Professors Wendy Wagner, Katherine Barnes, and Lisa Peters are among the few scholars who have conducted a study of rulemaking that measures both the pre-NPRM period and the post-NPRM period. In their study of ninety EPA rulemakings (“Wagner et al. study”), they found that the pre-NPRM period averaged over twice as long as the post-NPRM period. They also found that a high proportion of rulemakings did not end with issuance of the final rule. Rather, the agency made changes for years after the issuance of the final rule in response to petitions for reconsideration or petitions for judicial review. The Wagner et al. study suggests that, had the Yankees determined the total time required to conduct each rulemaking, their finding that most of the rulemakings they studied were completed within two years would become a finding that most rulemakings were actually completed within six to eight years.

Like the other characteristics of the rulemaking process that yield ossification, the long period before an agency issues an NPRM is primarily attributable to judicial decisions that impose heavy burdens on agencies, well beyond those required by statute. Courts reject, as

19 See Yackee & Yackee, supra note 1, at 1480.
21 Id. at 144 n.150 (finding a pre-NPRM period of 4 years and a post-NPRM period of 1.5 years).
22 Id. at 146.
23 Id.
24 Yackee & Yackee, supra note 1, at 1458.
25 See Wagner et al., supra note 20, at 143, 145. The 4 to 1.5 ratio Wagner et al. found implies a total rulemaking time of 7.32 years for a rulemaking with a post-NPRM period of 2 years.
fatally defective, any NPRM that does not adequately “foreshadow[]” the final rule the agency issues, or that does not identify every study or other data source the agency relies on in the statement of basis and purpose that an agency must incorporate into every final rule. As Wagner et al. recognized: “Indeed, the courts have made it painfully clear that if a rule is to survive judicial review, it must be essentially in final form at the proposed rule stage.”

Because there is usually a long time between the issuance of an NPRM and the issuance of a final rule in a major rulemaking, it is extremely difficult for the NPRM drafters to anticipate either the potential elements of the final rule or the typically large number of data sources on which the agency will rely in the voluminous statement of basis and purpose that must be incorporated into a major rule. Like the judicially imposed requirements for an NPRM, the judicially imposed requirements for a statement of basis and purpose vastly exceed the statutory requirements. That is why the typical NPRM in a major rulemaking is at least scores, and often hundreds, of pages long. It also explains the finding in the Wagner et al. study that the pre-NPRM period of a rulemaking averages over twice as long as the post-NPRM period.

II. The Dataset for the Study

In drawing their conclusion, the Yackees relied on the average time between the issuance of an NPRM and the issuance of a final rule for every rulemaking in which DOI used notice and comment to issue a rule. That choice of dataset is based on a misunderstanding of the ossification hypothesis. Those of us who accept the accuracy of the hypothesis do not believe that it applies to all rulemakings. The vast majority of the thousands of rulemakings conducted by agencies each year involve issues that are not particularly controversial or that do not have major economic consequences. In those contexts, the no-

29 Wagner et al., supra note 27, at 110.
30 See 1 Pierce, supra note 27, at 593.
31 See Beermann & Lawson, supra note 26, at 894–900.
32 See 1 Pierce, supra note 27, at 593.
33 Wagner et al., supra note 20, at 144 n.150.
34 Yackee & Yackee, supra note 1, at 1454–55.
tice and comment procedure is not ossified. An agency can use the
procedure to issue rules that are noncontroversial or to resolve low-
stakes controversies quickly and with only a modest commitment of
resources. Ossification is a problem only in the context of the much
smaller number of rulemakings that raise controversial issues where
the stakes are high. That corresponds roughly to what the White
House refers to as economically significant rules.35 There are only
about one hundred such rulemakings each year,36 but they are, by def-
cination, the most important rulemakings.

Every study of economically significant rulemakings has found
strong evidence of ossification—a decisionmaking process that takes
many years to complete and that requires an agency to commit a high
proportion of its scarce resources to a single task.37 It is true, as the
Yackees note,38 that the studies of economically significant rulemak-
ings have not been scientific—in the sense that no one has engaged in
a systematic study of a dataset large enough to yield statistically rea-
ble findings. Indeed, most of the studies have focused on only one or
a few rulemakings.39

This is a major gap in our knowledge. Someone needs to engage
in a systematic empirical study of the average total amount of time
and resources required for an agency to issue an economically signifi-
cant rule through use of the notice and comment procedure. The
Yackees’ study provides no data that are at all useful in determining
whether, and to what extent, ossification is a problem in the context of
economically significant rules.40 The Yackees could do us all a big
favor by filling the gap they identify in our available data by engaging
in an empirical study of a large number of rulemakings in which agen-
cies have issued economically significant rules to determine the total
amount of time and total resource commitment required for an agency
to use notice and comment rulemaking to issue a major rule. That
would be a daunting task, but the findings of such a study would be
extremely valuable.

36 The Office of Information and Regulatory Affairs lists on its website every economi-
cally significant rule issued by every executive branch agency during each year since 1981. Office
of Info. & Regulatory Affairs, Office of Mgmt. & Budget, Historical Reports, REGINFO.GOV,
37 See Yackee & Yackee, supra note 1, at 1418 nn.15–19, 1419 n.22.
38 Id. at 1419, 1421.
39 See, e.g., id. at 1422–23 & nn.36–38.
40 Id. at 1479–80.
III. THE TIME PERIODS USED IN THE STUDY

The Yackees compared the duration of rulemakings in the period from 1950 to 1975 with the duration of rulemakings in the period from 1976 to 1990 because they claim the proponents of the ossification hypothesis believe that “in the mid-to-late 1970s federal rulemaking became ossified.”41 That is another misunderstanding of the ossification hypothesis. Ossification long antedated 1975. In fact, the Supreme Court issued two landmark opinions in 1973 and 1978 that deossified the rulemaking process, i.e., that eliminated major obstacles to efficient use of the notice and comment process that circuit courts had created during the 1960s and the early 1970s. As all administrative law scholars know, circuit courts made it extremely difficult and time-consuming for an agency to use the notice and comment process in a series of opinions issued in the 1970s.42 The first line of cases interpreted the words “after hearing”—ubiquitous in federal regulatory statutes—to require agencies to conduct oral evidentiary hearings in rulemakings.43 The second line of cases relied on common law reasoning as the basis for opinions that concluded that an agency had not made adequate procedures available when it refused to grant a request for an oral evidentiary hearing with respect to a particularly important contested issue of fact in a rulemaking.44

The Supreme Court rejected the reasoning and results of the first line of cases in 1973 in United States v. Florida East Coast Railway, Co.,45 and of the second line of cases in 1978 in Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.46 Following those opinions, courts could no longer require agencies to conduct oral evidentiary hearings that the Supreme Court has called “nigh interminable” before issuing rules.47 Those opinions still left courts with another means to delay rulemakings, however. In the 1960s and early 1970s, many courts were applying what is often called the “hard look” version of the arbitrary and capricious test.48 The

41 Id. at 1420.
42 See 1 Pierce, supra note 27, §§ 7.2, 7.8 (describing this history).
43 See id. § 7.2.
44 See id. § 7.8.
45 United States v. Fla. E. Coast Ry. Co., 410 U.S. 224, 240 (1973) (holding that the term “hearing” as used in the Administrative Procedure Act does not guarantee the right to present evidence orally or to cross-examine opposing witnesses).
46 Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council, Inc., 435 U.S. 519, 524 (1978) (holding that agencies may create additional procedural rights beyond notice and comment, but that courts may not impose such rights if agencies do not voluntarily grant them).
hard look approach required agencies to substitute extraordinarily detailed and encyclopedic statements of basis and purpose for the “concise general” statements Congress required. The D.C. Circuit made that substitution explicit by cautioning agencies not to take “literally” the statutory requirement that a statement of basis and purpose should be “concise” and “general.”

After the Court issued its landmark deossifying opinion in *Vermont Yankee*, Professor Paul Verkuil wrote his famous article—*Waiting for Vermont Yankee II*. Verkuil quoted the passages from *Vermont Yankee* in which the Court stated that it was issuing the opinion to preclude courts from replacing the prompt and efficient rulemaking procedure Congress had chosen with burdensome and time-consuming procedures of their own choosing. Verkuil noted that hard look review is functionally indistinguishable from the judicial practice that the Court held to be impermissible in *Vermont Yankee*—it adds significant time and resources to the rulemaking process by requiring agencies to substitute for the “concise general statement of basis and purpose” required by the Administrative Procedure Act a detailed and encyclopedic statement that necessarily spans hundreds of pages in the context of a major rulemaking. Thus, Verkuil argued that the Court should follow its opinion in what he called *Vermont Yankee I* with an opinion he called *Vermont Yankee II*, in which the Court forbids courts to substitute their own burdensome and time-consuming version of arbitrary and capricious review for the less demanding version Congress intended.

Verkuil and most of the rest of us were surprised and dismayed when the Court not only did not issue an opinion of the type Verkuil envisioned but instead issued its opinion in *Motor Vehicle Manufacturers Ass’n of the United States v. State Farm Mutual Automobile Insurance, Co.*—an opinion that has been widely interpreted as legitimating the practice of many lower courts of applying a hard look

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51 *Vt. Yankee*, 435 U.S. at 519.
54 See id. at 421–24.
55 See id. at 425–26.
version of the arbitrary and capricious test. As this recitation of history shows, judicial ossification of the rulemaking process long antedated 1975, and the Supreme Court’s opinions of the 1970s had the effect of partially, but only partially, deossifying the rulemaking process. Thus, the Yackees’ comparison of the duration of rulemakings before and after the mid-1970s can provide no data that have any value in testing the ossification hypothesis.

Of course, that leads logically to the question: what kind of comparative data would be valuable for that purpose? This Response suggests two promising possibilities. First, the Yackees could compare the duration of rulemakings before 1906 with the duration of rulemakings after 1906. As Professor Jerry Mashaw has explained, 1906 marked a major turning point in the relationship between courts and agencies. Before 1906, federal courts rarely engaged in any review of agency actions, and agencies were free to choose their own decisionmaking procedures. In 1906, Congress enacted the Hepburn Act—a statute that imposed, for the first time, mandatory procedures on an agency, coupled with instructions to courts to review the agency’s decisions. A comparison of the duration of rulemakings before and after 1906, thus, would provide data that would be useful in testing the ossification hypothesis.

Fortunately, Mashaw’s comprehensive history of administrative law in the nineteenth century is a fertile source of that type of comparative data. His account of the implementation of the Steamboat Safety Act of 1852 illustrates the potential efficiency and efficacy of rulemaking in the absence of judicially enforced procedural requirements. In the mid-nineteenth century, steamboat explosions were common, with significant loss of life resulting. Congress responded by creating a Board of Supervising Inspectors with the power to issue rules regarding the characteristics of boilers and boiler operators and to issue and revoke boiler operator licenses. Congress did not impose any mandatory procedures except a requirement to state reasons

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57 See, e.g., 1 Pierce, supra note 27, § 7.4.
59 Id. at 2245, 2247.
63 Id. at 1629–30.
64 Id. at 1638.
for each action taken. Additionally, federal courts had no power to review any of the Board’s actions. Within five years, the Board was able to take all of the actions needed to reduce the incidence of steamboat explosions by eighty percent. Mashaw and Harfst’s comprehensive study of a modern agency with a similar mission—the National Highway Traffic Safety Administration—produced starkly different findings. That agency required almost twenty years to issue a rule to address a single well-known hazard.

The second potentially useful source of comparative data can be found in Professors Steven Davidoff and David Zaring’s study of the process the Treasury Department and the Federal Reserve Board used to implement their plan to rescue the economy in 2008 from the high risk of a repeat of the Great Depression. The heads of the two agencies recognized that they could not take the kinds of expeditious actions that were essential to avoid a complete collapse of the financial markets if they had to comply with mandatory decisionmaking procedures, or risk rejection of their efforts by reviewing courts. Fortunately, they were able to identify old statutory provisions that conferred on the two agencies relevant powers that were not encumbered by mandatory procedures and that authorized actions that were not subject to judicial review. These provisions were critical to the nation’s ability to avoid another depression.

IV. Choice of Appropriate Normative Criteria

The Yackees recognize that it is difficult to identify an appropriate baseline to use to determine how long is too long for a rulemaking to take. I can suggest two possibilities. First, we could use agency compliance with statutory deadlines for issuing rules. In our system of government, Congress has the power to make normative judgments like how long is too long. Measured by that criterion, ossification is a serious problem. Congress frequently sets deadlines by which agen-

65 Id. at 1640–41.
66 Id. at 1656.
67 See id. at 1659.
69 Id. at 10–14, 85.
71 See id. at 513.
72 Id. at 524–25.
73 Yackee & Yackee, supra note 1, at 1457–58 & nn.216–18.
cies are required to issue rules, and agencies rarely comply with those deadlines.74 For instance, one study found that EPA had complied with only seventeen percent of the 328 deadlines for issuing rules contained in the Clean Air Act.75 Alternatively, the Yackees could use the views of people who have expertise with respect to agencies’ ability to further their statutory missions as a normative measure of how long is too long. Measured by that criterion, ossification is a serious problem. There is a veritable army of people with agency-specific substantive expertise who have expressed the view that ossification is a source of many serious problems.76 I am not aware of anyone with agency-specific substantive expertise who has challenged that near-universal belief.77 Rulemaking ossification is a real and serious problem measured with reference to any plausible normative baseline.

74 See id. at 1470–71 n.270.
75 ENVTL. AND ENERGY STUDY INST. & ENVTL. LAW INST., STATUTORY DEADLINES IN ENVIRONMENTAL LEGISLATION: NECESSARY BUT NEED IMPROVEMENT (1985).
76 The Yackees cite to some of this voluminous literature. Yackee & Yackee, supra note 1, at 1417–19 nn.13–23.
77 But see id. at 1419 nn.24–25.