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### Goldilocks Deference

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# Goldilocks Deference?

*Daniel H. Cole, Elizabeth Baldwin, and Katie Meehan\**

*Over the years, courts reviewing rules and decisions of federal administrative agencies have given those agencies greater or narrower latitude in interpreting enabling legislation, ranging from the “hard look” doctrine to various levels of deference under case names such as Chevron, Auer, and Skidmore. This paper examines a distinct type of judicial deference that might arise only in special subset of cases where an agency is sued by two different interested parties arguing diametrically opposed positions. For example, the EPA may be sued on a major, substantive rule by the regulated industry arguing that the rule is too restrictive and by environmental groups arguing that it is too lax. In such cases, we hypothesize that reviewing courts might exercise “Goldilocks deference,” based on the assumption that if environmental groups and regulated industries are dissatisfied, then the agency’s rule must be just about right. Using an empirical dataset of 160 cases, we show that EPA is more likely to prevail when it is sued by both sides, suggesting that the hypothesis of Goldilocks deference is at least plausible.*

## I. INTRODUCTION

Whenever the US Environmental Protection Agency promulgates a “major” new substantive rule, it is highly likely to be sued either by regulated industries (sometimes along with affected states) complaining that the regulation is too harsh under the law; environmental groups (and sometimes affected states) complaining that the regulation is too lax under the law; or both. This paper is about the last case, where both industry and environmental groups sue EPA, one complaining that its regulation is too stringent and the other complaining that it is insufficiently stringent. We hypothesize that, when this occurs, the agency tends to win on judicial review because the reviewing court follows a principle we refer to as “Goldilocks deference,” according to which, if both sides object, then EPA’s rule or standard must be just about right.

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Between 1995 and 2010, EPA faced an average of 155 lawsuits annually, excluding employment and contract-related cases and cases under the National Environmental Policy Act, which are generally handled by the U.S. Attorneys' Offices (US GAO 2011). The majority of these lawsuits are in response to new EPA regulations or to EPA's implementation of amended statutes, and the most common plaintiffs in EPA cases are trade associations and private companies, followed by environmental groups (US GAO 2011). When industry sues EPA, environmental groups often will join in defense of the agency. Industry, likewise, will support the agency when it is sued by environmentalists. In relatively rare cases, however, EPA rules are challenged by both industry *and* environmental groups. It is this sub-set of cases in which we are interested – cases where industry and environmental groups both wish to invalidate a rule that is seen as too stringent to please industrial groups but too lax to please environmental groups. If empirical evidence shows that EPA wins such cases more often than others, this result may be due at least in part to what we call “Goldilocks deference.”

Empirical analyses of the regulatory state are not uncommon (see, e.g., Mashaw and Harfst 1990; Seidenfeld 1997; Coglianese 2002; Breyer 2009; Feller 2014). Many studies assess the effectiveness or cost of EPA regulations (e.g., Breyer 2009). Very few, however, focus on judicial review of environmental statutes, despite the undeniably important role judicial review plays in environmental regulation. Among the few notable exceptions,<sup>1</sup> Schroeder & Glicksman (2002) examines the impact of *Chevron* on judicial review of EPA decisions from a dataset of 300 cases. Some 75 percent of “economically significant” rules promulgated by EPA between 2001 and 2005 were challenged in court (Johnson 2005). The relative scarcity of empirical studies examining the impact of judicial review on environmental law is somewhat surprising given the wealth of data (easily accessed on databases such as Lexis and Westlaw), particularly court's rulings, as well as a small but growing body of literature on how judicial ideology, litigant attributes, and other factors affect case outcomes.

To the authors' knowledge, there have been no comprehensive studies establishing how often EPA prevails in court. EPA maintains data on all lawsuits, including win rates, but that data is proprietary (according to a denial of a FOIA request from one of the authors of this paper).<sup>2</sup> Existing studies, however, provide some details on EPA's “win rate” under the statute that has produced the most litigation to date – the Clean Air Act (CAA) (US GAO 2011). In a 2012 study of all air toxics regulations promulgated under §112 of the CAA after its 1990 amendments, EPA was sued in seven cases (some involving multiple issues), mostly by environmental groups. The agency prevailed completely in only one of those seven cases (Wagner 2012, Appendix 1, p. 1791).<sup>3</sup> According to a recent doctoral dissertation (Wheat

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<sup>1</sup> Studies by Revesz (1997) by and Ringquist & Emmert (1999), empirically examining whether factors such as judicial ideology or precedential value of cases affects environmental case outcomes. An additional exception is litigation involving the Forest Service, which has been more thoroughly studied (e.g., Jones & Taylor 1995; Malmshemer et al. 2004).

<sup>2</sup> Personal communication between one of the authors and administrators at EPA headquarters (on file with the authors).

<sup>3</sup> Wagner (2012) was primarily concerned with what happened to agency regulations following judicial review, finding that EPA often failed to address the reviewing courts' concerns.

2013) using a random sample of 100 CAA cases between 1993 and 2008, the EPA “won” 60 percent of the time.

In the present study, we conduct a complete review of cases involving judicial review of major, substantive EPA regulations under the CAA to explore the possibility of Goldilocks deference.<sup>4</sup> Our statistical models evaluate whether EPA is more likely to prevail in court when it is sued by both sides, controlling for relevant factors such as the party in control of the executive branch when EPA promulgated the rule, the judicial ideology of the deciding court, and case attributes such as year of decision, number of counts raised, and number of amicus briefs. We also investigate *Chevron* deference as an alternative explanation for EPA’s likelihood of winning, both independent from and in combination with Goldilocks deference. Our results show that EPA is significantly more likely to win when both industry and environmental groups sue. However, our results also suggest that this “Goldilocks” effect had a larger effect in cases decided prior to *Chevron*. This suggests the courts may have developed an initial presumption of Goldilocks deference that was later partially subsumed by *Chevron* deference in cases decided after 1984. Our findings contribute to the literature on judicial review by suggesting the possible existence of a significant, though implicit, judicial heuristic not previously noticed.

The paper proceeds as follows. In the following section, we provide a brief summary of judicial oversight over EPA rulemaking. We then summarize the findings of empirical studies on judicial behavior to identify other factors that might affect whether EPA prevails in court. Next, we discuss our data and analytical methods. After presenting the results of our empirical model, we provide qualitative analysis of a case, *Utility Air Regulatory Group v. EPA*, 471 F.3d 1333 (D.C. Circuit 2006). We then discuss our results, including potentially important implications for game-theoretic models of agency rulemaking and the litigation strategies of potential plaintiffs, before briefly concluding.

## II. LEGAL BACKGROUND: EPA RULEMAKING AND JUDICIAL OVERSIGHT

Constitutionally, only Congress has the authority to enact laws for the entire United States, but it can lawfully delegate authority to administrative agencies to issue rules and regulations consistent with “enabling” legislation. So, for example, the 1972 Clean Water Act required the Environmental Protection Agency (created by Executive Order of President Nixon in 1970 to implement the CAA) to implement a permit system for industrial effluent discharges based on best available technologies of water pollution control (33 U.S.C. §1342). To be lawful, agency regulations must: (1) not violate the 1949 Administrative Procedures Act (APA), which in essence requires agencies to provide public notice and accept public comments for a significant period of time between proposal and final adoption of rules or regulations, which must be adequately supported in the record of decision (5 U.S.C. §§ 550 *et seq.*); and (2) must be consistent with the terms of the “enabling” statute under which the

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<sup>4</sup> Our review is based on Lexis and Westlaw searches in the D.C. circuit in which EPA was a defendant.

agency is purporting to act (a requirement implicit in the APA’s requirement that regulations are “in accordance with law”).<sup>5</sup>

Administrative agency rulemaking (among other activities) is subject to oversight by all three branches of the federal government. In this study, we are concerned with oversight only by the judiciary. The APA, as well as enabling legislation, authorizes judicial review of agency rules and regulations to ensure compliance with the constitution, enabling statutes, and the APA itself. While environmental lawsuits arise in various federal courts of appeal, the CAA has a unique feature that gives the D.C. Circuit original jurisdiction over most rule challenges (Wenner 1982).<sup>6</sup> In recognition of that court’s outsized influence throughout the field of administrative law, and to avoid unnecessary complications associated with multi-jurisdictional analyses, this study is restricted to cases arising under the CAA.

Any “interested party” can challenge EPA rules in federal court, subject to constitutional and prudential standing requirements. Petitioners may argue that EPA rules are arbitrary and capricious or unsupported by substantial evidence in the record under the 1946 Administrative Procedures Act (APA), 5 USC §§551-559. While such cases were common in the first few years following the enactment of the Clean Air Act, they have become markedly less common over time due to the impact of *Chevron USA v. Natural Resources Defense Council*, 467 US 837 (1984).

The Clean Air Act also sets out its own guidelines for judicial review, specifying that entities with appropriate standing can seek review of EPA rules that are “in excess of statutory jurisdiction, authority, or limitations, or short of statutory right; or promulgated without observing lawfully required procedure.” (42 U.S.C. § 7607(b)(9)(C)). As a practical matter, most non-procedural court challenges to EPA regulations are filed by regulated entities (arguing that some new regulation is *more stringent* than the law allows), environmental groups (arguing either that EPA is not obeying statutory requirements to promulgate regulations or the regulations it is promulgating are *less stringent* than the law requires),<sup>7</sup> and states (arguing the same points as either regulated entities or environmental groups).

Under *Chevron*, when the D.C. Circuit or another federal appellate court reviews the merits of new agency rules and regulations under enabling legislation, they typically exercise some deference to the agencies, though the agencies still bear the burden of supporting their rules by substantial evidence under the APA. See *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council*, 435 US 519 (1978). One reason for this deference is presumed agency expertise in dealing with complex issues involving law, science, and technology. In the 1984 *Chevron* case, the US Supreme Court unanimously (though with only six justices participating) adopted a specific, two-part test for determining whether an agency’s interpretation of its enabling legislation, embodied in some regulatory decision, was lawful: (1) if the agency’s interpretation was contrary to clear language in the statute,

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<sup>5</sup> Other statutory requirements are imposed on agency regulatory activities, as well as several presidential Executive Orders, but those additional requirements are not material for this study.

<sup>6</sup> On the allocation of judicial jurisdiction over federal agency actions, see Wald 1992, p.527-30.

<sup>7</sup> Environmental groups also are authorized by the pollution-control to bring enforcement actions – so-called “citizen suits” – but this study is not concerned with enforcement actions, only with statutory or constitutional challenges to substantive agency rules and regulations.

its interpretation could not stand; but (2) in the case of ambiguous statutory language, the court would defer to the agency's interpretation so long as it was a "reasonable" interpretation of the ambiguous statutory language. *Chevron USA v. Natural Resources Defense Council*, 467 US 837 (1984). Application of the *Chevron* two-step test has been subject to a great deal of empirical analysis, generally finding that since *Chevron*, courts are more likely to affirm agency decisions (see, e.g., Shuck and Elliott 1990; Miles and Sunstein 2006; Czarnecki 2008; Pierce and Weiss 2011).

### III. FACTORS THAT AFFECT EPA'S LIKELIHOOD OF PREVAILING

#### A. *The Goldilocks Deference Hypothesis*

In this paper, we hypothesize that the EPA is significantly more likely to prevail when it is sued by *multiple* litigants with directly opposing objections to a major, substantive EPA rule, including (but not limited to) rules that turn on the agency's interpretation of scientifically and technologically complex information. In CAA cases, for example, the U.S. Environmental Protection Agency is charged with translating vague statements of Congressional intent, such as an objective that states must make "reasonable progress" toward meeting clean air standards, into rules that can be readily and objectively enforced. EPA often proceeds by defining congressional objectives in scientific and technical terms, developing standards that can be readily measured and monitored to determine whether the objective of "reasonable progress" is met. When EPA rules are challenged, the courts must determine whether EPA's use of scientific and other evidence in setting standards comports with congressional intent as reflected in the language of the statute.

It is in these cases, we argue, where the courts might exercise "Goldilocks deference." In such cases, it may be difficult for the courts to objectively discern whether EPA's rules meet vague Congressional objectives, particularly when judges may not be well-versed in EPA's technical models. Indeed, a comprehensive review of challenges to EPA decisions in the 1990s suggests that federal courts are reluctant to overturn EPA when doing so requires questioning the reasonableness of EPA's approach to reconciling divergent policy considerations (Schroeder & Glicksman 2002). Given this reluctance, we posit that courts may use industry challenges as an indicator that EPA rules might be too stringent, or alternatively may use environmental group challenges as an indicator that EPA rules might be too lax.

This approach to judicial decision making may be especially plausible when courts are tasked with determining whether EPA's rules are "reasonable," since reasonableness is, in large part, based on the perceptions of those who are involved in the matter, and political actors often define their positions based on others' support or opposition (e.g., Lindblom 1965). Judges might or might not be classed as "political actors," but they certainly are, like the rest of us, subject to framing effects and other "cognitive illusions" (Guthrie, Rachlinski and Wistrich 2002). Conceivably, it could make a difference whether EPA is sued by just one side (or the other) or sued by both sides. If sued by just industry plaintiffs, a reviewing court only has to consider over-stringency. If sued by environmental groups, it need only consider over-laxity. But if sued by both sides, the court must consider both over- and under-

stringency. What a court considers “reasonable” in a case where the only allegation is either over-stringency or insufficiently stringent, might be significantly different in a case where different plaintiffs allege both over- and under-stringency.

Our description of the Goldilocks hypothesis admittedly paints a simplified picture of a more complicated reality. In promulgating a rule, EPA must address many factors besides the pollution-reduction standard, including (among others): which entities are subject to the standard; how compliance will be measured and monitored; and whether or not to provide flexibility to states in implementing the standard. As a result, when industry and environmental groups oppose the stringency of a proposed regulation, they rarely bring equal and opposite challenges to the same portion of a regulation. More often, they challenge different portions of that regulation. For example, industry might challenge a rule on the grounds that the emission standard itself is too stringent, while environmental groups challenge the rule on the grounds that too many entities are exempt from the standard. In the next section, we illustrate this point with the case of *Utility Air Regulatory Group v. EPA*, 471 F.3d 1333 (D.C. Circuit 2006), in which industry challenged EPA’s 2005 “Regional Haze Rule” on the grounds that the rule applied to too many sources, while environmental groups challenged the rule on the grounds that it gave states too much flexibility to exempt certain sources. The court rejected both challenges to the rule. The case serves to illustrate how the Goldilocks hypothesis plays out in practice, with industry and environmental groups mounting opposing – but not directly opposite – challenges to a given rule.

The Goldilocks hypothesis must also recognize the reality that EPA only sometimes “wins” a case in its entirety, since most cases involve multiple, distinct counts and, in judicial review, the court can choose to uphold EPA on all counts, some counts, or no counts, making it difficult to determine whether a case in which EPA prevailed on, say, 4 out of 5 counts constitutes a “win” for the agency. For purposes of this paper, we use two different approaches to defining an EPA “win.” In our primary models, an EPA “win” refers to EPA prevailing on a particular challenge raised within a case. As a robustness check, we also run models that count an entire case as a “win” if EPA’s rule was upheld in its entirety – e.g., EPA won all of the counts raised in the case.

Ultimately, the Goldilocks hypothesis posits that when the time comes for judicial review, the federal circuit court – most often the D.C. Circuit – employs an unarticulated heuristic that, if plaintiffs on both sides feel aggrieved, then the EPA’s action is more likely than not within the law. The part of that hypothesis we test in this paper is that, in such cases, the courts are more likely to side with the EPA on any given challenge that a plaintiff brings against the rule. The heuristic, if it exists, is only one factor, of course. It is easy enough to imagine cases where, despite any Goldilocks effect, the agency does and should lose because it is in clear contravention of statutory directives. In such cases, it does not and should not matter whether it is sued by industry, environmental groups, or both. However, when sued by both sides (so to speak), a reviewing court might find it difficult to articulate a principled basis for holding that regulated industries should prevail over environmental groups or *vice versa*. In those cases, the unstated Goldilocks heuristic could lead to EPA prevailing more often on any particular challenge.

Even if a Goldilocks heuristic exists, it could reflect strategic selection effects, where participants may nudge cases into what they perceive to be a “Goldilocks” category regardless of their true levels of dissatisfaction with EPA rules. For example, if environmental groups believe that a Goldilocks effect exists, then they might file a complaint arguing that the rule is too lenient, even if they actually believe the standard is fine, in order to increase the agency’s odds of prevailing in a suit brought by industry plaintiffs arguing that the standard is too stringent. Indeed, EPA itself might be expected to engage in strategic behavior, especially on more politically contentious rules, inviting lawsuits from both industry and environmental plaintiffs by “splitting the difference” in setting standards. or and litigants on both sides might be expected to engage in strategic behavior that increases their likelihood of prevailing in court, subject to legal and practical limitations on their strategic choices.

### *B. Alternative Explanations for EPA’s Win Rate in Goldilocks Cases*

Goldilocks deference is not the only factor that affects EPA’s likelihood of winning, and even if EPA prevails more often when both sides sue, other explanations are possible. It is plausible, for example, that cases where both sides sue are simply more likely to be ones in which EPA has stayed clearly within the bounds of its Congressional authorization, and the courts base their verdicts on EPA’s rule alone, without exercising any kind of internal decision heuristic.

It is also possible that EPA might prevail more often on challenges within Goldilocks cases because the court is exercising other forms of deference. The most obvious example would be *Chevron* deference, from the landmark 1984 Supreme Court ruling that instructed federal courts to provide substantial deference not only to EPA but to all federal agencies for rules that do not contravene clearly expressed congressional intent. If the timing of possible Goldilocks cases correlated with pre- and post-*Chevron* cases, then any apparent Goldilocks effect might simply be a *Chevron* effect. It is also possible that, even if Goldilocks deference does exist, its effectiveness might become obscured by *Chevron* deference or some other or some other canon of judicial review.

Finally, EPA and litigants on both sides can be expected to engage in strategic behavior that increases their likelihood of prevailing in court, subject to legal and practical limitations on their strategic choices. As a result, the “Goldilocks” cases in our sample could reflect strategic selection effects, where participants may nudge cases into what they perceive to be a “Goldilocks” category for strategic reasons rather than their true levels of dissatisfaction with EPA rules. For this reason and others, our empirical approach, described in Section IV below, cannot establish a causal relationship between Goldilocks cases and EPA’s likelihood of winning. Unlike many empirical analyses that deliberately seek to establish a causal relationship between independent and dependent variables, however, we argue that our results are interesting because of – rather than in spite of – the possibility that plaintiffs engage in strategic behavior to manipulate outcomes.

### *C. Other Factors that Affect Judicial Outcomes*

APA requirements and standards of judicial review are not the only factors that affect case outcomes, however. Over the past few decades, empirical legal scholars have demonstrated that other factors, including attributes of judges, on the one hand, and attributes of litigants on the other, may affect judicial behavior and thus shape case outcomes. While it is nearly impossible to determine whether, or the extent to which, such factors affect the outcome of individual cases, scholars can aggregate numerous cases and utilize statistical techniques to determine whether such factors have a statistically significant effect on case outcomes. Indeed, studies have demonstrated that attributes of judges can affect case outcomes. Partisanship – here defined as the party of the politician appointing the judge – can affect judicial outcomes, at least in specific policy areas. Songer and Davis (1990) found that judges appointed by Democrats were more likely to issue “liberal” decisions in First Amendment, civil rights, and criminal appeals cases; and Songer and Haire (1992) found similar results in obscenity cases. In appeals courts, the ideology of the entire panel may affect outcomes in environmental cases (Revesz 1997). Moreover, the ideology of higher-level judges and panels may also matter leading lower-level judges to behave strategically to decrease chances of reversal on appeal (Wheat 2013; Epstein et al. 2007).

Litigant attributes, too, can affect case outcomes. Galanter (1974) found that repeat litigants were more likely to prevail than first-time litigants or one-time litigants. However, amicus briefs from more experienced parties can help level the playing field for inexperienced or underdog petitioners (Songer et al. 2000). Wheat (2013) finds that “upperdog litigants” with more litigation experience and resources are significantly more likely to prevail in environmental law cases than are inexperienced litigants.

#### **IV. UTILITY AIR REGULATORY GROUP V. EPA AS AN ILLUSTRATIVE CASE**

To illustrate how the Goldilocks principle might work in practice, we provide a brief case study of one case, the D.C. Circuit’s decision *Utility Air Regulatory Group v. EPA*, 471 F.3d 1333 (D.C. Circuit 2006). The case concerns EPA’s 2005 “Regional Haze Rule” (RHR) (40 CFR § 51.308) under § 169 of the CAA (42 USC § 7491), which was intended to meet statutory requirements that states make “reasonable further progress” to improve visibility in Class I “Prevention of Significant Deterioration” (PSD) areas, such as national parks and wilderness areas (42 USC §7491(a)(1)).

The RHR sought to improve visibility in those areas by controlling emissions of ozone and particulate matter from stationary sources. When the rule was promulgated, visibility in those areas was estimated at only 20 percent of “normal conditions.” 471 F.3d at 1334. The goal of the rule was not to return visibility all the way to “normal conditions,” but to take a first significant step – reasonable further progress – in that direction. To that end, the RHR required States to impose Best Available Retrofit Technology (BART) – among the most stringent technological standards in the CAA – on a specific group of stationary air pollution sources put into use between August 7, 1962 and August 7, 1977, whose operations fell within one of 26 statutory classifications under the CAA. Among those sources, the BART requirement applied only to those “reasonably ... anticipated to cause or

contribute to any impairment of visibility in any mandatory Class I Federal area. 471 F.3d at 1335. Thus, the rule imposed a two-step regulatory process.

*Step I: Attribution.* States first had to identify which sources within their respective jurisdictions were subject to the rule because they “cause or contribute” to visibility impairment in Class I Federal areas. The rule defined “cause or contribute” to include sources that emit “pollutants within a geographic area from which pollutants can be ... transported downwind to a Class I area, an approach known as ‘collective contribution.’” *Id.* As an alternative to the “collective contribution” approach, the rule also permitted states to “use other reasonable approaches for analyzing the visibility impacts of any individual source or group of sources.” 70 Fed.Reg. at 39,162; 471 F.3d at 1336.

*Step II: Determination.* Once the sources to be regulated were identified, the states then would tailor an individualized BART for each regulated source, based on five factors: (1) cost of compliance; (2) energy and non-air quality environmental impacts of compliance; (3) existing pollution-control technologies in use at the source; (4) the remaining useful life of the source; and (5) the degree of visibility improvement reasonably anticipated to result from the installation of BART. However, the RHR also provided states an alternative to the imposition of BART. It permitted them to use a “regional approach, so long as the alternative would be ‘better-than-BART’—i.e., it would make “greater reasonable progress” toward improving visibility than under BART.” 471 F.3d at 1335. “Greater reasonable progress” could be inferred if modeling indicated that (i) visibility would not decline in any Class I area, and (ii) an overall improvement in visibility would result across all affected Class I areas, greater than BART would provide. 40 CFR §51.308(e)(3); 471 F.3d at 1336.

When the final rule was published, industry groups sued, arguing it was too stringent; and environmental groups sued, arguing that it was not stringent enough. More specifically, industry plaintiffs argued that the rule applied BART to too many sources, while environmental plaintiffs argued that the rule allowed states to exempt too many sources from BART. A three-judge panel of the DC Circuit US Court of Appeals unanimously rejected both claims, finding the EPA’s rule to be a “reasonable interpretation” of §169A of the CAA, which required EPA’s rule to make “reasonable progress” toward the goal of preventing and remedying visibility impairments in Class I areas. *Id.*

Before the DC Circuit, industry petitioners presented three arguments, only one of which amounted to a serious challenge to the rule’s lawfulness under the CAA. That argument was that the rule was too stringent because the “collective contribution” approach of Step I of the two-step regulatory process would impose BART even on sources whose emissions could be shown to have zero impact on visibility in downwind Class I Federal areas. The court rejected this argument by reference to the five-factor test in Part II of the regulatory process. Specifically, the fifth factor on the expected degree of visibility improvement from BART installation would be zero, if the source did not contribute at all to visibility impairment in the first place. That, according to EPA’s own interpretation of the test, would be dispositive, regardless of the other four factors. 471 F.3d at 1338.

Environmental petitioners argued that the rule was too lax, although they took issue with different aspects of the rule. They argued that EPA’s RHR failed to meet the CAA’s requirements that states make “reasonable further progress” to achieving the statutory goal

of remedying visibility impairments in Class I PSD areas, under 42 USC §7491(a)(1). More precisely, it was not that the RHR in and of itself failed to make “reasonable further progress,” but the fact that another EPA regulation, the “Clean Air Interstate Rule” (CAIR), 70 Fed.Reg. 25,162 (May 12, 2005), allowed states to avoid BART requirements altogether for one major type of source, electricity generating units (EGUs), if they opted to participate in an emissions trading program established by CAIR. The environmental petitioners argued that CAIR, in effect, undermined the RHR’s BART requirements to an extent that “reasonable further progress” could not be guaranteed. 471 F.3d at 1337, 1339-40.

The court rejected the environmental petitioners’ argument based on several considerations. First, EPA’s final version of CAIR included analyses demonstrating that CAIR would achieve greater overall emission reductions than BART and would make greater reasonable progress toward improving visibility in Class I areas. 471 F.3d at 1338. Second, the phrase “reasonable further progress” is ambiguous and not clearly defined anywhere in the CAA. So, the court must defer, under *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 468 U.S. 837 (1984), to the agency’s interpretation of that phrase, so long as that interpretation is reasonable. Referring back to the agency’s definition of “reasonable further progress” in the RHR, which requires zero reduction in visibility in any Class I area plus aggregate improvement in visibility across all Class I areas, the court found EPA’s interpretation reasonable and, in fact, in agreement with the environmental petitioners’ own interpretation. Indeed, the court observed that CAIR itself included a provision according to which states “cannot assume that CAIR will satisfy all of its visibility-related obligations.” 70 Fed.Reg. at 39, 143; 471 F.3d at 1337. The court even quotes the EPA’s brief in the case, according to which “states must, if CAIR is substituted for BART and is not likely to achieve that goal, ‘take other measures as necessary to achieve reasonable progress goals including at each Class I area.’”

We do not express an opinion on the merits of the DC Circuit’s decision in *UARG v. EPA*. Instead, we offer the cases a (not necessarily representative) illustration of the way that a Goldilocks heuristic might affect cases in our sample: the kind of case in which EPA sometimes finds itself between a rock and a hard place, with regulated industries arguing that a rule is too strict and environmental groups arguing that it is too lenient. Here, both sides challenged the substantive merits of EPA’s 2005 Haze Rule, contesting the same underlying issue – how EPA determines whether specific sources are subject to or exempt from BART regulations. As with many possible Goldilocks cases, however, the different sides brought different counts, contesting different specific provisions of the rule according to which EPA determined its applicability to existing facilities. In the end, the court found that EPA’s rule *did* make reasonable progress towards its CAA obligations.

## V. RESEARCH DESIGN, DATA, AND METHODS

### A. Data

Our analysis relies on an original dataset of cases challenging major Clean Air Act rules on the merits between 1970 and 2015. We focus on CAA cases primarily because the CAA is

technologically complex; it presents numerous cases of the kind of vague and aspirational statutory language that is most likely to lead to Goldilocks deference; and it provides a rich sample for empirical analysis, while allowing us to hold the circuit court constant. EPA has engaged in major rulemakings under the Clean Air Act nearly continuously since its enactment, adding new rules for new sources of pollution over time and in response to statutory changes. Moreover, the CAA has attracted significant attention from litigants. Well-organized industrial organizations representing the chemical, petroleum, and power sectors often challenge new CAA rules, as do experienced environmental plaintiffs such as the Sierra Club and the Environmental Defense Fund. This provides us with a reasonably large sample of cases, decided on the merits, with variation in petitioners that includes cases brought by industry groups alone; cases brought by environmental groups alone; and cases in which both industry and environmental groups have sued.<sup>8</sup>

To assemble our universe of cases, we used the Lexis/Nexis legal database. We first searched for all D.C. Circuit cases in which EPA was named as a party,<sup>9</sup> resulting in a potential pool of 1,104 cases. From this initial pool of potential cases, we culled any cases not brought under the CAA, cases that concerned matters other than rule-making, cases that concerned non-major rules, and cases that were entirely procedural in nature, leaving us with 160 cases.<sup>10</sup>

## 1. Case-level Variables

For each case in our sample, we manually coded the attributes of each case. To measure our independent variable of interest, we create a categorical variable, Goldilocks, equal to one when EPA is sued by at least one environmental group and at least one industrial plaintiff. To determine whether Goldilocks deference, if it exists, might persist post-Chevron, we create a binary indicator equal to 1 if the case was decided post-Chevron. We then create an interaction term by multiplying the binary Goldilocks and Chevron indicators. This interaction term is equal to 1 in Goldilocks cases decided post Chevron and equal to 0 otherwise.<sup>11</sup>

We also include a number of case-level control variables. We created three additional categorical variables based on the plaintiffs that bring suit: Environmental Only cases, where

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<sup>8</sup> Coglianese (2002, p. 1129) points out that only 26% of EPA rules are subject to lawsuits. Its “most significant rules” are subject to judicial review only about 35% of the time.

<sup>9</sup> We limit our investigation to the D.C. Circuit because it resolves the lion’s share of cases involving judicial review of EPA rules.

<sup>10</sup> Following Revesz (1997), we deemed as “procedural” challenges based on insufficient notice and opportunity to comment, insufficient response to comments, inadequate explanation of a rule’s basic statement of basis, and improper *ex parte* communications. Revesz (1997, p. 1729).

<sup>11</sup> As robustness checks, we replaced the *Chevron* variable and interaction term with variables representing 1977 and 1990 changes to the Clean Air Act, which might have affected standards of judicial review of agency actions. Results were similar to those of the case-level model presented in Table 5, suggesting that while Goldilocks cases increase EPA’s likelihood of winning, this effect was more pronounced prior to the CAA amendments. These results are available on request from the authors. We also tested for “Skidmore deference,” named for a 1944 case (*Skidmore v. Swift & Co.*, 323 US 134) but activated in 2000 in *Christensen v. Harris County*, 529 US 576 (2000). Skidmore deference had no significant effects.

EPA is sued by at least one environmental group and *no* industrial plaintiffs; Industry Only cases, where EPA is sued by at least one industrial plaintiff and *no* environmental groups; and Government Only cases, where EPA is sued by government plaintiffs alone. As a measure of case complexity, we also coded the number of counts raised in each case. As a measure of political salience, we coded the number of amicus briefs filed in the case. We also created a binary indicator, equal to one when the initial rule was promulgated under a Republican administration; and the year the case was decided. To control for ideology of the appellate panel deciding the case, we calculate the median Judicial Common Space score (Epstein et al. 2007) of judges who ruled on the case (typically a three judge panel, although 2 cases were heard *en banc*). These scores combine data on the ideology of the appointing president and data on a judge’s voting record to assign judges a score representing their ideologies, where lower (negative) scores represent liberal justices and higher (positive) scores represent conservative justices. To control for ideology of the appellate court as a whole, we calculate the average Judicial Common Space score for the year that the case was decided.

## 2. Count-level Variables

To determine EPA’s win rate, we disaggregated each case into individual counts raised by plaintiffs. We discarded counts that were purely procedural (e.g., inadequate notice and comment). This gave us a total sample of 677 substantive counts clustered within 160 cases. For each of these counts, we created a binary variable equal to 1 if the court upheld that portion of EPA’s rule, 0 otherwise. Following Revesz (1997), rules or portions of rules that were invalidated by the courts or remanded to EPA for revision are counted as a loss for EPA. To control for the party that raised the count, we also created binary indicators equal to 1 if a count was raised by environmental groups, industry, or governments, respectively. These categories were not mutually exclusive – e.g., if a count was raised by multiple plaintiff types, it would be coded as a 1 for each type of plaintiff that raised the count. In practice, however, this was rare in the data.

### *B. Methods*

To test whether EPA is more likely to prevail on a given count when it is raised in a Goldilocks case, we estimate the multi-level probit model specified below. We use a multilevel model here because the fact that counts are clustered within individual cases is a violation of the normal OLS assumption that observations are independently distributed. We also cluster standard errors by case. Models are run using the probit command in Stata. Our model is as follows:

$$Pr(Y_{ij}= 1|X) = F(\beta_0 + \beta_1 I_{ij} + \beta_2 X_j + \beta_3 G_j + \beta_4 C_j + \beta_5 (G*C)_j) + \varepsilon_{ij},$$

where  $Y_{ij}$  is a binary variable representing whether EPA wins or loses on count  $i$  within case  $j$ ;  $I_{ij}$  is a vector of binary indicator that indicate whether count  $i$  within in case  $j$  was brought

by industry or environmental plaintiffs;  $X_j$  is a vector of characteristics of case  $j$ ;  $G_j$  is a binary indicator that case  $j$  is a Goldilocks case;  $C_j$  is a binary indicator that case  $j$  was decided post-*Chevron*;  $(G*C)_j$  is an interaction term that indicates that case  $j$  was a Goldilocks case decided post-*Chevron*; and  $\varepsilon$  represents the error term.

This research design allows us to assess whether EPA is significantly more likely to prevail in possible Goldilocks cases, as well as whether a Goldilocks effect differs before and after *Chevron*. Our interpretation depends on whether  $\beta_5$ , the coefficient on the Goldilocks\**Chevron* interaction term, is statistically significant. If  $\beta_5$  is statistically significant, this indicates that any Goldilocks effect is conditional on whether the case arose pre- or post-*Chevron*, and we need to sum  $\beta_3$ ,  $\beta_4$ , and  $\beta_5$  to calculate the likelihood of EPA prevailing in post-*Chevron* cases relative to the reference group. If  $\beta_5$  is not statistically significant, however, the Goldilocks effect is not conditional on *Chevron*, and interpretation is much more straightforward:  $\beta_3$  represents the effect of Goldilocks case on EPA's likelihood of winning, regardless of whether the case occurred pre- or post-*Chevron*. While these models allow us to examine whether Goldilocks deference persists distinct from *Chevron* deference, we are careful to note that model results do not necessarily imply a *causal* relationship, since there may be other, unobserved factors associated with Goldilocks cases that affect the likelihood of EPA winning. We discuss this possibility in the discussion.

As an additional robustness check, we also estimate a case-level model with a case-level dependent variable equal to 1 if EPA prevails on every count raised in the case. In these cases, EPA can be said to have a “clean” win because its rule is upheld in its entirety. Because prevailing on every count in the case establishes a strict standard for what constitutes a “win,” the dependent variable used in this model may undercount cases that might be considered a substantive win for EPA. Nevertheless, the case level model can provide an additional check on our model. The robustness check uses the following probit model:

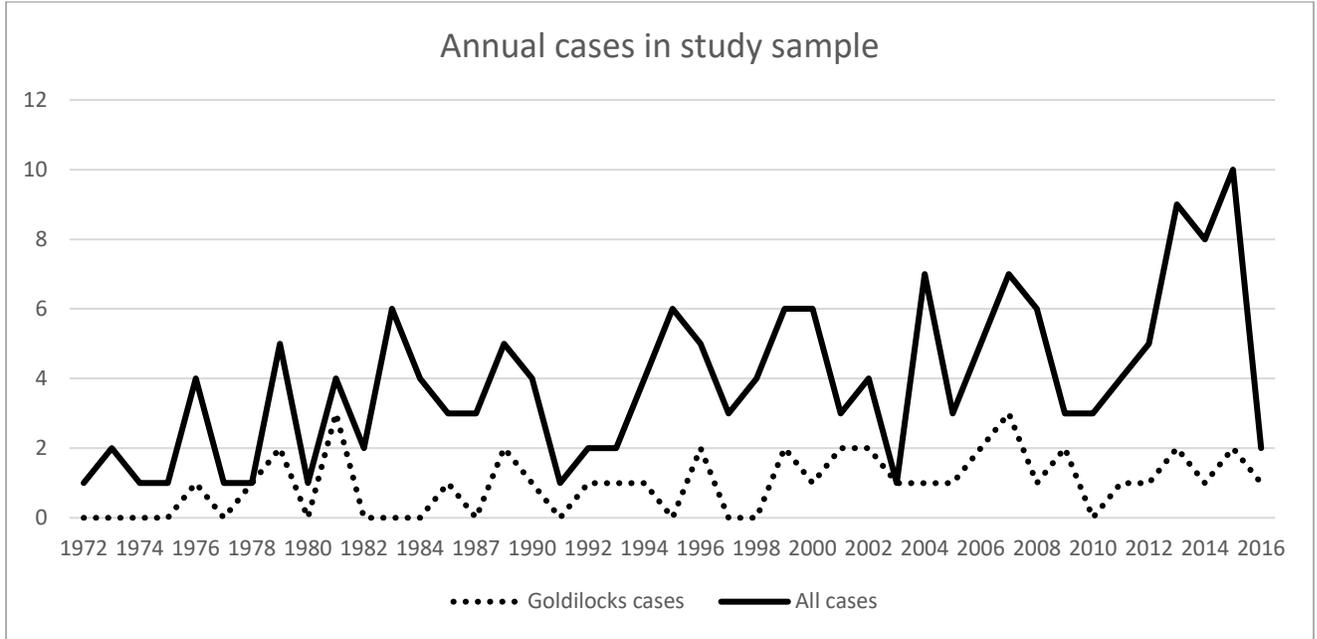
$$Pr(Y_j=1|X) = F(\beta_0 + \beta_1 X_j + \beta_2 G_j + \beta_4 C_j + \beta_5 (G*C)_j + \varepsilon_j),$$

Where  $Y_j$  is a binary variable equal to 1 when EPA wins all of the counts in case  $j$ ,  $X$  is a vector of characteristics of case  $j$ ,  $G_j$  is a binary indicator that case  $j$  is a Goldilocks case;  $C_j$  is a binary indicator that case  $j$  was decided post-*Chevron*;  $(G*C)_j$  is an interaction term that indicates that case  $j$  was a Goldilocks case decided post-*Chevron*; and  $\varepsilon$  represents the error term.

## V. RESULTS

Figure 1 provides an overview of the cases in our sample over time. Between 1972 and 2016, the number of cases in our sample varied between 1 and 10, with a small increase in total cases over time. The number of Goldilocks cases generally mirrors this trend, but rarely exceeds 2 cases in any given year.

Figure 1: Goldilocks cases over time



Descriptive statistics for case-level variables are presented in Table 1. EPA’s rule was upheld entirely in just under half of cases. Goldilocks cases account for 25% of the sample. Cases included an average of 4 counts and less than one amicus brief. Roughly half of the cases concerned rules that were promulgated by Republican administrations, and nearly 80% of cases were raised after Chevron’s passage in 1984. On average, the median judicial common space scores are just to the right of center at 0.19, with average scores for the entire *en banc* court slightly further right at 0.23.

Table 1: Descriptive Statistics for Case Level Variables

Variable	N (cases)	Mean	Std. Dev.	Min	Max
<i>Case level variables</i>					
EPA rule upheld	160	0.438	0.498	0	1
Goldilocks cases	160	0.256	0.440	0	1
Chevron	160	0.794	0.406	0	1
Goldilocks*Chevron	160	0.213	0.410	0	1
No. of counts	160	4.300	4.431	1	27
No. of amici	160	0.819	1.600	0	10
Regulation promulgated by Republican administration	160	0.513	0.501	0	1
Median panel ideology	160	0.190	0.522	-0.504	0.692

Median ideology of <i>en banc</i> court	160	0.227	0.460	-0.354	0.692
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Descriptive statistics for count-level variables are presented in Table 2. EPA prevailed on nearly 75% of the counts that were raised. Industry challenged EPA on 56% of the counts raised, environmental groups on 32% of the counts raised, and governments on 16% of the counts raised. Only 4% of counts were brought by multiple plaintiff types.

Table 2: Descriptive Statistics for Count Level Variables

Variable	n (counts)	Mean	Std. Dev.	Min	Max
<b>Count level variables</b>					
EPA prevails on count	688	0.738	0.440	0	1
Count brought by industry	688	0.560	0.497	0	1
Count brought by environmental groups	688	0.318	0.466	0	1
Count brought by governments	688	0.163	0.369	0	1

Because our analysis also asks whether Goldilocks deference, if it exists, may have changed following the *Chevron* ruling, Table 3 summarizes the number and characteristics of cases decided pre- and post-*Chevron*, including the total number of cases brought, the number of counts raised; the number of plaintiffs, intervenors, and amici; and whether the plaintiffs were environmental groups, industrial groups, governments, or Goldilocks cases. Table 3 shows that there were 33 cases decided in the 14-year period between the enactment of the CAA and the *Chevron* decision, and 127 cases decided in the 30-year period between *Chevron* and the end of the study period in 2016. While the frequency of challenges has increased post-*Chevron*, the number of counts raised, the number of plaintiffs, the number of intervenors, and the number of amici are similar across the two periods, suggesting that

Table 3: Pre-and Post-Chevron Case Characteristics

<i>Characteristics of Cases</i>										
<i>Variable</i>	<i>Pre-Chevron Cases (33 cases)</i>					<i>Post-Chevron Cases (127 cases)</i>				
	<i>N</i>	<i>Mean</i>	<i>Median</i>	<i>Min</i>	<i>Max</i>	<i>N</i>	<i>Mean</i>	<i>Median</i>	<i>Min</i>	<i>Max</i>
Number of counts per case	33	5.939	5.651	1	27	127	3.874	3.972	1	23
Number of plaintiffs	33	3.848	2.830	1	12	127	2.819	2.477	1	17
Number of intervenors	33	2.152	1.938	0	9	127	2.071	2.697	0	20
Number of amici	33	1.121	1.980	0	8	127	0.740	1.487	0	10
Goldilocks (both sides sue)	33	0.212	0.415	0	1	127	0.268	0.445	0	1

Industrial plaintiffs only	33	0.606	0.496	0	1	127	0.354	0.480	0	1
Environmental plaintiffs only	33	0.030	0.174	0	1	127	0.268	0.445	0	1
Government plaintiffs only	33	0.152	0.364	0	1	127	0.110	0.314	0	1

the complexity and salience of cases has remained fairly constant. The proportion of Goldilocks cases increased slightly, from 21% to 27% of cases. The proportion of cases in which industry was the only plaintiff decreased significantly, from 60% of pre-*Chevron* cases to 35% of post-*Chevron* cases. The proportion of cases in which environmental groups were the only plaintiff increased even more dramatically, from less than 1% of pre-*Chevron* cases to over 25% of post-*Chevron* cases.

Table 4 presents our primary model results, which predict the likelihood that EPA prevails on a given count. While Column 1 shows which independent variables have a statistically significant correlation with the probability of EPA winning on a given count, the marginal effect of the coefficients listed in Column 1 are not readily interpretable. Probit models assume that the marginal effect of a single independent variable can vary across different values for all covariates. To illustrate, consider the question of whether an additional plaintiff affects the likelihood that EPA prevails on a given count. In cases with few plaintiffs, the marginal effect of an additional plaintiff might be quite large, while an additional plaintiff may have little if any effect in cases with many plaintiffs. To estimate the marginal effect of adding an additional plaintiff, it is thus necessary to specify the values that are assumed for all covariates. Table 4, column 2 presents results that show the marginal effects of all independent variables, holding all covariates at their mean values. The discussion that follows focuses on coefficients from Table 4.

Starting with the Goldilocks variable, results indicate that EPA is significantly more likely to prevail on a given count if it is raised in a Goldilocks case. Moreover, because the Goldilocks\**Chevron* interaction term is not statistically significant, the Goldilocks effect does not appear to be conditional on *Chevron*. These results suggest that EPA was 22% more likely to prevail on counts that were raised within Goldilocks cases, holding all other covariates constant at their means. In addition, *Chevron* has an independent, statistically significant, and nearly identical effect, increasing the likelihood of EPA prevailing by 22%.

EPA is significantly more likely to win when a count is brought by industry, although counts brought by environmental groups have no effect on the likelihood that EPA prevails. Other coefficients are not systematically correlated with count outcomes, however. Median panel ideology has a positive correlation with EPA winning and median ideology of the *en banc* court has a negative correlation, but neither of these correlations are statistically significant. It does not matter whether the rule was promulgated by Republican administrations, and neither the number of counts raised nor the number of amicus briefs filed had a significant effect on EPA's likelihood of prevailing, suggesting that the complexity or salience of given case does not affect EPA's likelihood of winning.

Table 4: Primary probit model results predicting likelihood of EPA prevailing at the count level

	<i>Model 1 Preliminary results</i>	<i>Model 2 Marginal effects holding all covariates at mean values</i>
<i>Count level variables</i>		
Count brought by industry	0.541* (0.216)	0.163* (0.0635)
Count brought by environmental groups	-0.108 (0.224)	-0.0326 (0.0673)
<i>Case level variables</i>		
Goldilocks cases	0.728* (0.316)	0.219* (0.111)
Chevron	0.724* (0.247)	0.218* (0.0737)
Goldilocks*Chevron	-0.728 (0.400)	-0.219 (0.118)
Number of counts	0.0133 (0.0146)	0.00401 (0.00435)
Number of amici	-0.0911 (0.0647)	-0.0274 (0.0192)
Regulation promulgated by Republican administration	0.0648 (0.204)	0.0195 (0.614)
Median panel ideology	0.0763 (0.156)	0.0230 (0.0470)
Mean ideology of <i>en banc</i> court	-0.392 (0.200)	-0.118 (0.060)
Year	-0.0000920 (0.000157)	-0.0000277 (0.0000474)
Cases	160	160
Counts	688	688
Wald chi2	119.92	-

Standard errors in parentheses

\* p<.05, \*\* p<.001, \*\*\* p<.0001

Table 5 presents results from our robustness check, a case level model that predicts the likelihood that EPA's rule is upheld in its entirety – e.g., EPA prevails on all counts in a

given case. Unlike the primary model, the Goldilocks\*Chevron interaction term is significant, suggesting that the likelihood of EPA prevailing on all counts is conditional on *Chevron*. Prior to *Chevron*, EPA was 46% more likely to win all counts in Goldilocks cases relative to cases in which only one side brought suit. After *Chevron*, this effect is reduced to just 7% higher than the reference case – non-Goldilocks cases brought before *Chevron*. *Chevron* itself has a much larger effect (30%) on EPA’s likelihood of having its rule upheld in its entirety.

Table 5: Robustness check probit model results predicting likelihood of EPA prevailing on all counts, in a given case

	<i>Model 1</i> <i>Preliminary results</i>	<i>Model 2</i> <i>Marginal effects holding all covariates at mean values</i>
<i>Case level variables</i>		
Goldilocks cases	1.302* (0.558)	0.462* (0.190)
Chevron	0.854* (0.386)	0.303* (0.132)
Goldilocks*Chevron	-1.956* (0.600)	-0.695*** (0.195)
Number of counts	-0.0454 (0.0263)	0.0161* (0.009)
Number of amici	-0.0384 (0.0714)	-0.0137 (0.0253)
Regulation promulgated by Republican administration	-0.180 (0.207)	-0.0641 (0.0867)
Median panel ideology	0.242 (0.159)	0.0859 (0.0730)
Mean ideology of <i>en banc</i> court	-0.566 (0.294)	-0.201* (0.101)
Year	-0.000183 (0.000200)	-0.0000651 (0.0000706)
Cases	169	160
Wald chi2	24.88	-

Standard errors in parentheses

\* p<.05, \*\* p<.001, \*\*\* p<.0001

## VII. DISCUSSION

The statistical results indicate that EPA is significantly more likely to prevail on any given count when it is sued by both industry and environmental groups on major, substantive rules, and our qualitative analysis of *Utility Air Regulatory Group v. EPA* shows how these Goldilocks cases

might play out in practice, with industry and environmental groups raising different challenges to EPA rules that are designed to meet vague standards such as “reasonable progress.” This quantitative and qualitative analysis suggests that the D.C. Circuit *might* be applying a different standard of review we refer to as “Goldilocks deference.” This finding is potentially important to the game-theoretic account of agency rulemaking referred to in the Introduction. If EPA is more likely to win (or believes it is more likely to win) on judicial review by promulgating a rule that leaves both regulated industries and environmentalists dissatisfied, then it might be expected to adopt a strategy of splitting the difference (though not necessarily 50/50) in order to generate lawsuits from both sides. EPA might be expected to deploy this strategy whenever it is defensible under its underlying enabling statutes and the Administrative Procedure Act (APA).

We recognize, of course, that our results do not suggest a straightforward causal relationship between both sides suing and Goldilocks deference.<sup>12</sup> Our statistical models show that EPA is more likely to win when both sides sue, but our findings do not rule out the possibility of alternative explanations. EPA might be more likely to win in cases with diverse plaintiffs for reasons unrelated to judicial deference – for example, in complex cases where EPA has not plainly strayed outside of its congressional authorization, it is plausible that EPA is both more likely to be sued from both sides *and* more likely to win, in which case Goldilocks deference would play no meaningful role. While our models do not rule this out, the fact that measures of case complexity – the number of counts raised and amici who filed briefs – are not correlated with EPA’s likelihood of winning reduces the plausibility of this alternative explanation.

Another possible explanation is that Goldilocks cases correlate with courts’ more deferential standards of review, post-*Chevron*. Descriptive statistics show that Goldilocks cases have increased, albeit slightly, post-*Chevron*, and our results suggest that the effect of Goldilocks cases is distinct from the effect of *Chevron* deference. However, they also indicate that *Chevron* has eroded the previously more pronounced Goldilocks effect. Before *Chevron*, EPA was significantly more likely to prevail in Goldilocks cases, whether EPA’s likelihood of winning is measured at the count level or at the case level. After *Chevron*, the Goldilocks effect has a much more limited effect on the likelihood that EPA’s rule is upheld in its entirety. This finding is both intuitive and consistent with the literature. If *Chevron* greatly increased EPA’s overall win rate on judicial review, as the literature suggests (see, e.g., Shuck and Elliott 1990; Miles and Sunstein 2006; Czarnecki 2008; Pierce and Weiss 2011), then, as a matter of course, we would expect the differential between EPA’s overall win rate and its win rate in Goldilocks cases to diminish.

Surprisingly, while *Chevron* deference subsumed much of the Goldilocks effect, it did not subsume it all. Statistically, a significant Goldilocks effect remains discernible at the individual count level post-*Chevron*. That is, on individual counts within cases, the Goldilocks effect persists independently of, and additive to, *Chevron*. EPA wins on more counts that meet conditions for Goldilocks deference than *Chevron*, alone, can explain. This provides, perhaps, the strongest evidence in support of our Goldilocks hypothesis.

A final explanation for our findings, though not inconsistent with the Goldilocks hypothesis, is that EPA engages in strategic behavior that increases its likelihood of prevailing in court, subject to legal and practical constraints on its strategic choices. Consequently, the Goldilocks cases in our sample could reflect strategic selection effects, where EPA, possibly with assistance from plaintiffs on one side or the other, who are not really dissatisfied with the rule,

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<sup>12</sup> The implication of *any* causal relationship is hazardous based on the limited data we have amassed, and the absence of corroborating statements among the reasons offered in judicial decisions.

nudges cases into the Goldilocks category to improve its likelihood of prevailing.<sup>13</sup> Even if this is true, however, it would indicate that policy makers within EPA believe in a Goldilocks effect; and that belief must be positively reinforced in court often enough to persist.

Unlike many empirical analyses that deliberately seek to establish a causal relationship between independent and dependent variables, we would claim that our results are interesting because of – rather than in spite of – the possibility that plaintiffs engage in strategic behavior to manipulate outcomes. For example, if regulated industries file suit against EPA to overturn a rule with which environmental groups are entirely pleased, those groups might file suit anyway, alleging that EPA’s rule is not stringent enough, simply to increase the likelihood that the agency’s rule will survive judicial review. Since those groups are likely to file briefs in support of EPA’s rule in any case, the incremental cost of filing against the agency might not be too great. With limited budgets, environmental groups are likely to pick and choose among possible cases, selecting those with the greatest political, social or ecological consequences from their perspective.

What is good for the goose is also good for the gander. Regulated industries that are thoroughly content with an EPA rule that relaxes standards might sue to improve prospects that EPA will prevail on judicial review in a suit instigated by environmental groups. Given that regulated entities have deeper pockets than environmental groups, they might even be expected to employ this strategy more frequently.

## VII. CONCLUSION

In the absence of information from the agency and litigants, including information about rulemaking and litigation strategies, which is difficult to obtain, it would be hazardous to attempt to draw any firm conclusions about the existence or non-existence of “Goldilocks deference.” Our statistical findings are not conclusive but clearly suggest some such effect. Even so, whether any such effect might actually be strong enough to motivate game-theoretic rulemaking and litigation strategies by the agency or interested parties remains questionable, especially at the case level, where *Chevron* deference subsumes what we are calling “Goldilocks deference”. At the case level, since *Chevron* deference has been in effect, any Goldilocks effect does not appear to matter very much, yielding only a 25 percent difference in case outcomes, compared with a 47 percent increase in EPA’s likelihood of winning pre-*Chevron*. Of greater importance, though, is our finding, at the count level, that *Chevron* cannot, by itself, explain EPA’s significantly higher win rate. How might this be explained? The hypothesis of “Goldilocks deference” is at least plausible.

Even with respect to our case level findings, where *Chevron* is sufficient to explain EPA’s higher win rate, it is interesting to speculate whether our hypothesized “Goldilocks deference” might reemerge from the shadows, if *Chevron* is overturned in favor of a “hard(er) look doctrine,” as some scholars and jurists have been predicting. However, the Supreme Court’s recent decision in *Kisor v. Wilkie*, 588 US \_\_ (2019) reaffirming “*Auer* deference”<sup>14</sup> – an offspring of *Chevron* – suggests that *Chevron* is unlikely to be overturned by the current Supreme Court.

Finally, if Goldilocks deference exists, as our statistical results suggest might be the case, then the issue arises of how widespread it might be. We have not tested for it in courts aside from the D.C. Circuit. Do other courts tacitly follow it? What about federal agencies other than the

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<sup>13</sup> It is also possible that any expectation of “Goldilocks deference” might affect settlement rates by making it easier for parties to accurately predict the outcome of judicial review in accordance with the Priest-Klein hypotheses (Priest and Klein 1984).

<sup>14</sup> *Auer v. Robbins*, 519 US 452 (1997).

EPA? Because it depends on a special set of cases in which an agency faces suits from diametrically opposed plaintiffs, we would not expect it to be applicable to all federal agencies. It might benefit resource management agencies within the Departments of Interior, Agriculture, and Transportation. As with the EPA, cases involving rules proposed by those agencies often affect the sometimes diametrically opposed interests of industry and environmental groups. The Occupational Safety and Health Administration (OSHA) also faces potential plaintiffs, in employers and workers, whose interests can be diametrically opposed. On the other hand, only in the rarest circumstances would we expect something like Goldilocks Deference to be of benefit to the Treasury Department. In the end, if “Goldilocks Deference” exists, it is necessarily a special rule for a limited category of disputes.

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