Abstract: We compare policy outcomes in a separation-of-power system with a “Lochnerized” judiciary to outcomes in a system with no effective judicial review of ordinary legislative policies. In the Lochnerian system, judges use their veto power to substitute their class-based personal policy preferences for ordinary socioeconomic policies enacted by the legislature. In the system without effective judicial review, judges defer to the legislature’s policy decisions and do not strike down ordinary legislation. To compare the two types of judicial regimes, we develop a simple game-theoretic model with a legislature composed of a majority and minority party, a set of lower courts, and an appellate court. The legislative majority initially chooses whether to enact a policy. Any policy it enacts could be reviewed by a lower court. Some lower court decisions are in turn successfully appealed to the appellate court. We first identify how legislative anticipation of Lochnerian judicial review affects legislative decisions. Secondly, we show that judicial review provided by an activist, politicized judiciary in which every judicial decision is politically motivated and legally indeterminate nonetheless secures important constitutional values better than deferential judicial review.

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Lochner v. New York (1905), which used the Fourteenth Amendment to strike down a law limiting the hours that bakers could work, ranks as one of the U.S. Supreme Court’s most infamous decisions. Commentators often list *Lochner* with such constitutional *horribles* as *Dred Scott* and *Plessy*.\(^1\) In its opinion, the Court announced that it would independently review the “reasonability” of ordinary legislation.\(^2\) Legislatures would have to demonstrate that a statute pursues a legitimate goal and that the statutory means adopted by the legislature are directly related to achieving that purpose.\(^3\) Criticism of the opinion, reflected from the start in dissents written by Justice Harlan and Justice Holmes, argued that the majority marked out an intrusive, undemocratic and illegitimate role for the judiciary. Holmes dissent in particular attracted attention early on. In a 1909 analysis of *Lochner*, Edward S. Corwin wrote that Holmes’ dissent was “more trenchant” than Justice Harlan’s, “cutting as it does through the momentary question of policy to the deeper, though inarticulate, major premise” of the majority opinion (1909, 669). By explicating what he took to be the “major premise” of the case, Corwin (and others) would construe the central argument in *Lochner* to be something like this:

**Major premise:** A proper conception of the judicial role allows judges to substitute their policy preferences for those of the legislature in ordinary policy matters.

**Minor premise:** We [the *Lochner* majority] disagree with the New York law limiting the number of hours bakers can work.

**Conclusion:** The New York law is void.

The views advanced early on by Holmes, Harlan, and Corwin ultimately prevailed and *Lochner* became not only a rejected precedent, but a reviled decision. Much of the opposition to *Lochner* derives from two particular implications of the decision’s “major premise” (or at least from what critics construed

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1 A Lexis-Nexus search shows that, within the last ten years, 116 law review articles have paired *Lochner* and *Dred Scott*, and 148 articles have paired *Lochner* with *Plessy*. The vast majority of these pairings carry a negative connotation.

2 By “ordinary” legislation we mean legislation that neither trenches on a fundamental right (such as speech) nor touches on a suspect classification (such as race). These special categories of legislation still receive heightened judicial scrutiny today. See, e.g., FCC v. Beach Communication (1993, 315). The controversial distinctive in *Lochner* was the notion that judges would rigorously scrutinize all legislation, including ordinary socioeconomic legislation, that did not fall into any special category of constitutional danger.

3 “[T]he assertion that the subject relates though but in a remote degree to the public health does not necessarily render the enactment valid. The act must have a more direct relation, as a means to an end, and the end itself must be appropriate and legitimate, before an act can be held to be valid…” (*Lochner v. New York* 1905, 57).
as the decision’s major premise). First, critics argue that *Lochner* conceives of an improper role for the judiciary in a democracy by providing unelected judges authority over the ordinary policy decisions of elected legislatures. Secondly, critics argue that if judges are free to substitute their own policy preferences for those of the legislature, judicial decisions will be inconsistent across similar cases. This inconsistency results, the argument goes, because decisions will depend on the idiosyncratic political commitment of the specific judge(s) chosen to hear a particular case. Outcomes will therefore vary with which judge(s) hears a case.

Critics thus contend that *Lochner* endorses a sort of unprincipled activism for the judiciary, and that this kind of activism should be rejected. As we discuss in detail below, in rejecting the judicial role conceived by *Lochner*, critics argue that judges should instead broadly defer to ordinary socioeconomic policies enacted by legislatures, meaning that judges should provide no effective review of those types of policies.4

This sets the stage for our analysis. We develop a simple game-theoretic model to compare the policy outcomes resulting with a Lochnerized judiciary to the outcomes resulting with a deferential judiciary that provides no effective review of ordinary legislative enactments. Contrary to the traditional criticisms of *Lochner*, we show that even if judges act in accord with *Lochner*’s major premise, the equity and efficiency of legislative outcomes generally improves relative to legislative outcomes generated in systems in which courts defer to legislative policies. Of these two results, the equity outcome is the strongest, but also the least surprising. The addition of a (probabilistic) veto that can be invoked against discriminatory legislation will naturally decrease the amount of discriminatory legislation a legislature enacts and that is ultimately implemented.

Although contingent, the more surprising result suggested by our analysis is that the addition of a

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4 In recent years, a group of “revisionist” scholars has attempted to rehabilitate certain aspects of the *Lochner* decision. These revisionists argue that the decision did not approve the substitution of judicial policy preferences for those of the legislature, but instead represents a logical extension of an “anti-class” jurisprudence developed in state courts from the mid-part of the 19th Century. While revisionists do not believe that Corwin’s “major premise” really is the driving force behind *Lochner*, they agree that the activist judicial role usually ascribed to the decision is improper. We return to a fuller discussion of revisionism below.
judicial veto – even when exercised by “political” judges – can increase efficiency. Under reasonable parameters, a probabilistic veto alters the mix of policies that a legislature enacts and that are ultimately implemented in such a way that net social efficiency is increased. As far as we know, this result has not been reported before in the literature. More importantly, it is this result that challenges a central objection to *Lochner* – that the “countermajoritarian” nature of *Lochnerian* review necessarily reduces social efficiency. Of equal surprise is that both the equity and efficiency improvements that occur as a result of *Lochnerian* review result from a much-criticized behavioral implication of *Lochner*, namely that *Lochnerian* review creates legal indeterminacy by tying the use of the judicial veto to the idiosyncratic personal policy preferences of the particular judges who review challenged legislation. It is the very uncertainty that is introduced into the legislative arena by legal indeterminacy that induces legislators to reduce inefficient and factious legislation.

From the outset we also need to be clear what we are not arguing. *Lochner* is criticized not only for having an illegitimate conception of the judicial role, it is also criticized for the substantive policy positions it enforced, i.e., its “laissez faire” jurisprudence. Yet as Owen Fiss has pointed out, “*Lochner* stands for both a distinctive body of constitutional doctrine and a distinctive conception of judicial role: One could reject one facet of *Lochner* and accept the other” (1993, 19).\(^5\) This paper focuses on only one facet of *Lochner* – the “major premise” concerning the judiciary’s role in the policy process. The judges in the model we develop below are permitted to implement any substantive policy preferences that they wish. They are not confined to enforce a laissez-faire constitutional jurisprudence. Secondly, we should also underscore early on that the argument of the paper is not that judges should be narrowly political and unprincipled. Rather, we argue that even if judges are political and unprincipled, judicial review can still work to improve outcomes relative to the deferential alternative. Whether an impartial, principled

\(^5\) We should note that Fiss also defends the *Lochner* Court against the charge that the decision issued from the narrow political preferences of the Court. We invoke his distinction simply to identify that *Lochner* raised two distinct questions.
jurisprudence could deliver even better outcomes is a question that we do not address here. Finally, we are also not arguing that judicial review by Lochnerized judges is the only institution that can generate the kind of legislative “moderation” and improvements in efficiency that we highlight here. Other institutional features or the threat of repeated political interactions may serve the same purpose (e.g., de Figueiredo 2002). Instead, our goal is to establish the shortcomings in the traditional argument against judicial intervention in ordinary socio-economic policy-making that has been derived from the reaction to *Lochner*, and which has led to the large scale evacuation of these policy areas by judges over the last half-century.

Our argument proceeds as follows. Part I sketches in somewhat more detail the two major objections to *Lochner* noted above. Part II then develops a simple separation-of-power model of legislative-judicial interaction that permits comparison of policy outcomes when judges defer to legislative enactments to policy outcomes that result with a Lochnerized judiciary. Part III draws on the results to identify the conditions when important aspirations of American constitutionalism – equity and efficiency – can be better achieved by a Lochnerized judiciary than they can by a deferential judiciary. The last section concludes the paper.

**Part I. Illegitimacy, Indeterminacy and *Lochner’s* Major Premise**

Before turning to the model, it would be useful to sketch in a little more detail the two criticisms of *Lochner’s* “major premise” that we outlined above. We first look at the argument that *Lochner* conceives of an illegitimately political role for the judiciary in the policy process. Next we examine the related argument that, in a Lochnerian system, the outcomes of judicial review are indeterminate because they depend on the partisan commitments of the judges who are chosen to review different pieces of legislation. Critics of *Lochner* have traditionally concluded from these arguments that it would be better...

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Legal realism, which arose partly in response to the *Lochner* decision and has become, in the form of the attitudinal model (Segal and Spaeth 2002), the dominant view of judicial behavior in political science of course challenges the view that judges do (or can be made to) act in a principled, impartial fashion. In this sense, our analysis is designed to look for “second best” solutions, given that the ideal type of a principled, impartial judiciary may not be feasible.
for judges generally to defer to legislative enactments.

A. Judicial Illegitimacy and Lochner’s Major Premise

The criticism that *Lochner* approves the substitution of judicial policy preferences for those of the legislature is, of course, well known, and can be found both in scholarly commentary and in judicial opinions. While the criticism exists in many different versions, the basic objection is that this form of judicial activism represents an unwarranted intrusion of the judiciary into democratic decision-making. Consider a 1955 decision of the Supreme Court that articulated a classic rationale for rejecting *Lochner’s* interpretation of the Fourteenth Amendment’s liberty guarantee:

> The day is gone when this Court uses the Due Process Clause of the Fourteenth Amendment to strike down state laws, regulatory of business and industrial conditions, because they may be unwise, improvident, or out of harmony with a particular school of thought. We emphasize again what Chief Justice Waite said in *Munn v. Illinois*, “For protection against abuses by legislatures the people must resort to the polls, not to the courts” (*Williamson v. Lee Optical Co.* 1955, 488, citations omitted).

In *Day-Brite Lighting*, a 1952 case, the Court similarly rejected *Lochner* as intruding upon legislative prerogative and argued that courts should defer to legislatures in ordinary areas of socioeconomic policy:

> The liberty of contract argument pressed on us is reminiscent of the philosophy of *Lochner* . . . Our recent decisions make plain that we do not sit as a superlegislature to weigh the wisdom of legislation nor to decide whether the policy which it expresses offends the public welfare. The legislative power has limits . . . [b]ut the state legislatures have constitutional authority to experiment with new techniques; they are entitled to their own standard of the public welfare; they may within extremely broad limits control practices in the business-labor field (424, citations omitted).

Similar criticisms can be found in academic commentary. For example, Learned Hand argued that under *Lochner*, the judiciary becomes a “third camera with a final veto upon legislation with whose economic or political expedience [the Court] totally disagrees” (1908, 500). Gerald Gunther summarized Hand’s argument as follows:

> [T]he *Lochner* philosophy allowed unelected, politically unaccountable judges to decide whether a particular legislative purpose was or was not legitimate. Courts, Hand argued, were not super-legislatures: they exceeded their legitimate powers unless they deferred to elected legislatures on debatable issues (1994, 122).

Scholars have echoed Hand’s criticism for the better part of a century. Cass Sunstein summarized the
scholarly criticism, concluding that “[t]he received wisdom is that *Lochner* was wrong because it involved ‘judicial activism’: an illegitimate intrusion by the courts into a realm properly reserved to the political branches of government” (1987, 874). Howard Gillman similarly styled the conventional wisdom on *Lochner* to be that “the majority was assaulting the doctrine of separation of powers by substituting its conception of good, effective policymaking for that of the legislature” (1993, 3). The consensus that has emerged in reaction to *Lochner* among judges and scholars can be summarized as follows: All things being equal, majoritarian preferences should guide policy in a republican system of government. Given that legislators are elected and that judges are not, we expect legislative preferences to align with the preferences of a majority of the people more often than would the political preferences of judges. Therefore, unelected judges should not ordinarily substitute their political preferences for those of the legislature. Instead, judges generally should defer to legislative judgments (see White 2000, 241-268, Friedman 2001, Friedman 2002a, 2002b).

In recent years, this conventional view of *Lochner* has come under fire from a growing “revisionist” literature. Relying on careful historical analysis of judicial antecedents to *Lochner*, revisionists argue that the *Lochner* majority merely applied accepted jurisprudential principles opposed to “class legislation” that had developed during the 19th Century (largely in state courts). Contrary to the conventional reading of *Lochner*, revisionists contend that the decision did not in fact invite judges to use the judicial veto to substitute their personal policy preferences for those of the legislature. This paper does not aim to contribute to this aspect of the discussion over *Lochner*. We do want to note, however, that the revisionists do not attempt to defend the politicized judiciary implied by what Corwin styled to be *Lochner*’s major premise. Instead, they argue that Corwin (and the conventional view) is mistaken about the content of the major premise driving the decision. But like conventional scholars, revisionists would

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7 While revisionists deny that the *Lochner* decision reflects an unprincipled, politicized judiciary, some revisionists still reject *Lochner* on other grounds. Gillman (1993) for example, argues that while *Lochner* represented a principled jurisprudence, its 19th Century foundation was ill suited to respond adequately to the economic problems prompted by the rapid, mass industrialization of the early 20th Century.
generally reject an activist, unprincipled, policy-motivated judiciary as undesirable.  

B. **“Indeterminacy” and *Lochner’s major premise***

According to conventional critics, *Lochner’s* “inarticulate” major premise permitting judges to substitute their personal policy preference for those of the legislature implies more than an illegitimately political role for courts in the policy process. A second, related line of criticism asserts that *Lochner* created more *ex ante* legal indeterminacy than would a deferential judiciary. This follows from the decision’s “major premise” because judicial decisions regarding the validity of particular laws would depend on the idiosyncratic political preferences of the particular judges chosen to review those laws. As early as 1917 commentators expressly identified Corwin’s notion of the “inarticulate” political premise in *Lochner* as the reason for increasing indeterminacy of the Court’s decisions:

> [I]n the definition of what is “due process” the court leaves the major premise always inarticulate. . . . To leave the major premise inarticulate and to reach results on “judgment” or “intuition” is just a scheme for not having any rule of law or legal generalization which is susceptible of application (Kales 1917, 538).

Learned Hand argued similarly in 1908 that “A vote of the court necessarily depends not upon any fixed rules of law, but upon the individual opinions upon political or economic questions of the persons who compose it . . .” (1908, 501).

Traditional critics of *Lochner* conclude that the legal uncertainty induced by *Lochner’s* major premise provides an additional argument for judicial deference. Barry Friedman summarizes the argument this way: “[T]o the extent the Constitution created a vacuum, the lesson was one of deference: If the set of ‘facts’ underlying a legislative enactment was uncertain, and if the Constitution did not clearly forbid the enactment, then – as a matter of law – judges should defer to legislative will” (2001, 1452). Revisionists, of course, have engaged this criticism and respond that *Lochner* articulated a coherent and consistent doctrine no more indeterminate in application than any legal doctrine (see, e.g., Gillman 1993, 10, 15-18).

Our purpose here (again) is not to attempt to resolve the historical argument between *Lochner’s* critics

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8 Although revisionist scholarship is less explicit in its rejection of a “politicized” judiciary than the conventional account, the very fact that the revisionist argument is aimed at *saving* the court from the traditional attack suggests that it also views a politicized judiciary as something bad. See, e.g., Gillman (1993, 10-11, 205).
and the decision’s revisionist defenders. Instead, we simply want to underscore that both critics and revisionists treat “indeterminacy” as undesirable. The point of contention between *Lochner’s* critics and its defenders is simply whether or not the doctrine underlying *Lochner* is plagued by the vice of “indeterminacy.” In contrast to this apparent consensus, we argue that legal indeterminacy can be a virtue, at least when compared to the deferential standard that critics have *Lochner* have urged as the proper judicial response. In the model we develop below, it is precisely the indeterminacy of judicial outcomes resulting from judges’ idiosyncratic political preferences that produces better legislative outcomes than are produced with deferential judges.

**Part II. Modeling Judicial Review under *Lochner’s* Major Premise**

Critics of *Lochner* argue that the solution to the problems associated with the decision’s “major premise” – judicial intrusion into the policy process and legal indeterminacy – is that judges should defer to ordinary legislative enactments. To consider this claim, we compare legislative outcomes produced with deferential judicial review to legislative outcomes produced with “Lochnerian” judicial review. To do this, we first establish the relevant baseline model in which courts impose no effective judicial review. Next, we model legislative outcomes under a Lochnerized judiciary by building *Lochner’s* “major premise” into a second game-theoretic model. With both models in hand, we then compare the impact of judicial review on legislative outcomes as well as on the equity and efficiency of legislative proposals.

Before describing and solving the models, we want to motivate five key elements in those models that underlie our results. First, we assume that legislators seek only to advantage the narrow economic factions to which they belong. This assumption has root in both classical and modern literature. Madison’s classic formulation in *The Federalist* asserts an anthropology in which faction is “sown in the nature of man” (Madison 1961/1999, 47). He expressly argues that the economic and class interests of legislators necessarily implicate themselves in the legislation that they produce:

> [The] principal task of modern legislation . . . involves the spirit of party and faction in the necessary and ordinary operations of government. No man is allowed to be a judge in his own cause . . . [but] what are the different classes of legislators but advocates and parties to the causes which they determine?”(ibid.).
Recall, also, that the revisionist *Lochner* scholars have taught us that it was the problem of faction – of “class legislation” – that initially motivated the development of Lochnerian jurisprudence in the 19th century. This classical characterization of factious legislators found modern expression in modeling approaches advanced in significant positive-theoretic work on legislatures (see, e.g., Baron and Ferejohn (1988)).

Secondly, as noted above, the controversial aspect of *Lochner* is that it invites judges to apply their independent judgment over ordinary legislation (as opposed to modern “strict scrutiny” which is limited to legislation that trenches on fundamental rights, such as speech, or that touch on specific suspect classifications, such as race). While “ordinary” legislation may certainly be modeled in different ways, we model it as a legislative decision over the allocation of the benefit of a policy ($β$) and of the cost of that policy ($τ$) across factions. The policy costs and benefits may be distributed equitably or inequitably by the legislature, and the policies themselves may be efficient or inefficient. Our goal is simply to express in a generic fashion a recognizable form of ordinary “socioeconomic” legislation that served as the controversial focus of the criticism of *Lochner*.

Third, we assume that judges are not immune from factious interests but, like legislators, are motivated to advance the interests of the faction to which they belong. This assumption is motivated by two considerations. First, a key part of the traditional argument against *Lochner* departs from the claim that the decision exemplified the intrusion of politically motivated judges in the ordinary policy process, with critics drawing the conclusion that judges should practice judicial deference in these areas precisely because their political motivations make it illegitimate for them to intervene. Secondly, as with the other actors in the model, this motivational assumption is consistent with and commended by Madisonian premises. The key to institutional design in separation-of-power systems, according to Madison, is to make “ambition . . . counteract ambition . . . [so] that the private interest of every individual [government official] may be sentinel over the public rights” (ibid., 322). The acid test of the value of judicial review in a separation-of-power system is whether it “works” even when judges are no better than the legislators.
whose policies they review.

Fourth, we assume that a majority party with homogeneous interests controls the legislature and we do not iterate the game. We do this for several reasons. First, on a substantive level, modeling a finite-horizon game as an initial matter allows us better to identify and isolate an independent effect of judicial review on legislative outputs from other institutions that might have a tendency to mitigate the influence of faction. As is well known, purely intra-legislative games with infinite horizons can generate “fairer” legislative outcomes than the same game played in a single shot (see, e.g., Baron and Ferejon 1988, de Figueiredo 2002). Including this element would make it difficult to identify which outcomes are a figment solely of the iterated intra-legislative bargaining and which outcomes result from the institution of interest – judicial review. Further, iterated legislative models draw on bargaining games in which the actors seek to divide a given surplus. In this model, legislation is productive as well as distributive. The increased complexity of permitting productive legislation makes iterating the model rather more difficult than models which focus on dividing a given surplus. Iterating the finite-horizon game modeled here is even less tractable than iterating the (increasingly complex) bargaining games developed elsewhere. Hence, for an initial take on the matter, we model the legislative-judicial game with a finite horizon.

Finally, we assume a diffuse system of lower courts with an appellate court. The lower court that adjudicates the policy the legislature enacts is selected randomly from the set of lower courts. These assumptions serve two purposes. First, randomization reflects the fact that any district court judge has authority to veto legislation, and legislatures cannot control which lower court will initially hear a case. Secondly, in jurisdictions with multiple courts, judges are randomly selected to hear specific cases. We also assume an appellate court with authority to reverse lower court decisions (although without the time to reverse every decision adverse to the interests of the median judge). This serves to reflect the hierarchical system in the U.S. in which appellate courts can imperfectly monitor and reverse (some) lower court decisions.

These are the most salient aspects of the models we develop. Additional elements of the games will be described as needed below. We now turn to consider the specific models and their solutions.
A. Legislation without Effective Judicial Review

The relevant baseline for comparing the impact of a Lochnerized judiciary is a system in which judges defer to legislative enactments and do not effectively review ordinary socioeconomic legislation. In U.S. constitutional law, the judicial “deference” that replaced Lochnerian review is the effective equivalent of no judicial review. Gerald Gunther commented famously that deferential review is deferential in theory but it is “non-existent in fact.” Justice Stevens similarly noted in his concurring opinion in *U.S. Railroad Retirement Board v. Fritz* that the deference accorded by the majority to Congress means that “judicial review . . . constitute[s] a mere tautological recognition of the fact that Congress did what it intended to do” (1980, 180).9 Hence, we model judicial deference as the equivalent of a system of legislative supremacy in which there is no effective judicial review.

The legislature is composed of legislators who belong to one of two factions.10 We name them Faction A and Faction B. The factions engage in a simple, one-stage interaction. As we mentioned above, one faction controls a majority of legislators, the other is the minority faction. When we refer to “majority” or “minority,” we are referring to whether a faction controls a majority of the legislature. A “majority” legislative faction may control only a minority of judges.

The majority faction can use its legislative strength to enact any policy it desires. As mentioned above, we model ordinary socioeconomic legislation – legislation that touches neither on a suspect classification such as race or a fundamental right such as speech – as a policy that generates a divisible benefit of $\beta > 0$ at a divisible cost of $\tau > 0$. Legislation distributes the benefits and costs of a policy across the two factions. This is given by a quadruple $\{(\beta_A, \tau_A), (\beta_B, \tau_B)\}$, where $\beta_i, \tau_i \geq 0$ and $\beta_A + \beta_B = \beta$ and $\tau_A + \tau_B = \tau$. We do not assume that a policy’s benefits necessarily exceed its cost ($\beta_i \geq \tau_i$), which is to say that legislative proposals need not necessarily be (Kaldor-Hicks) efficient.

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9 The immediate context of Gunther’s and Steven’s statements is review under the Equal Protection clause, but it applies all the more to substantive due process, a rationale the Court has not explicitly invoked since the late 1930s.
While legislative majorities can transfer some elements of the cost of the policies they enact on to minority faction (e.g., the tax burden), nonetheless, there are some costs – transaction and opportunity costs – to enacting policies that the majority must bear itself (see, e.g., Spiller and Tiller 1997, Tiller and Spiller 1999). These costs are represented by $\varepsilon > 0$.

The equilibrium proposals in this simple model of legislative supremacy are obvious and stated without proof:

**Proposition 1:** Without effective judicial review, the legislative majority enacts a factious proposal that allocates the entire benefit $\beta$ to itself and imposes the tax burden $\tau$ on the minority faction whenever $\beta \geq \varepsilon$. Specifically, faction A will enact the policy $\{(\beta,0),(0,\tau)\}$ while faction B will enact the policy $\{(0,\tau), (\beta,0)\}$. For $\beta < \varepsilon$, the majority will enact no policy.

Our main interest in this (trivial) Proposition is as a baseline for comparing how the addition of Lochnerian judicial review changes the legislature’s choices. Nonetheless, it is useful to underscore two features of this equilibrium. First, the legislature always adopts the “most” factious policy in that the majority always allocates to itself the entire policy benefit and always imposes the full cost of the legislation on the non-benefited minority. In this regard the model conveniently tracks both the motivation for and the policy outcome of majority tyranny that Madison described in *The Federalist* No. 10:

> The apportionment of taxes on the various descriptions of property is an act which seems to require the most exact impartiality; yet there is, perhaps, no legislative act in which greater opportunity and temptation are given to a predominant party to trample on the rules of justice. Every shilling with which they overburden the inferior number is a shilling saved to their own pockets (1961/1999, 48).

Secondly, note that the legislature can enact inefficient policies in equilibrium, i.e., policies in which the associated cost exceeds the benefit of the legislation ($\beta_i < \tau_i$). The majority is concerned only with the transaction cost it must bear to enact a policy, and not with the tax burden imposed on the minority. Hence, inefficient policies will be adopted as long as $\beta \geq \varepsilon$. Both of these features (imposition

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10 Following Madison’s argument in *The Federalist* No.10, we understand a faction to be a group of people “who are united and actuated by some common impulse of passion, or of interest, adverse to the rights of other
of costs on non-benefited minorities and the adoption of inefficient legislation) mark deficiencies in
democratic politics that the US constitutional system aspires to mitigate.\textsuperscript{11}

\textbf{B. Legislation with a Lochnerized Judiciary}

We now add judicial review by a Lochnerized judiciary to the basic model. We do so by
incorporating the two attributes of \textit{Lochner} that are the focus of the criticism we surveyed above: The
Lochnerized judiciary is composed of judges willing to substitute their personal policy preferences for
those of the legislature, and judicial outcomes are indeterminate due to uncertainty over the political
preferences of the judge chosen to review the legislature’s enactment. We integrate these critical aspects
of a Lochnerized judiciary in the following way. First, judges belong to one of the factions. They are
“jurisprudentially unprincipled” because they use their judicial decisions to maximize their (and their
faction’s) payoffs. Secondly, we introduce decisional indeterminacy by incorporating two institutional
features of the U.S. judiciary we mentioned above. First, we model a two-tiered hierarchical judiciary\textsuperscript{12} in
which a lower court makes an initial decision that may (but will not necessarily) be reviewed by an
appeals court. Secondly, we also assume that numerous lower courts exist, any of which could be review
the policy enacted by the legislature.

Legislatures face uncertainty about judicial outcomes because of judicial decentralization and
incomplete information about whether a particular judge will be sympathetic or hostile to the policy the
legislature is considering. We model this uncertainty by allowing for two “types” of courts, courts that are
affiliated with faction A (Type A judges) and courts that are affiliated with faction B (Type B judges).
Hence, there are six players in the Lochnerian model: Legislative faction A, legislative faction B, a lower
court with a Type A judge, a lower court with a Type B judge, an appellate court controlled by Type A,
citizens, or to the permanent and aggregate interests of the community” (1788/1960, 78).

\textsuperscript{11} For example, in \textit{South Carolina v. Barnwell Bros., Inc.}, Justice Stone notes both deficiencies in the
context of an interstate commerce case: “State regulations affecting interstate commerce, whose purpose or effect is
to gain for those within the state an advantage at the expense of those without, or to burden those out of the state
without any corresponding advantage to those within, have been thought to impinge upon the constitutional
prohibition even though Congress has not acted” (1938, 184, n. 2). In the next term, Stone uses this passage as
authority for his famous \textit{Caroline Products} footnote 4 (152-153, n.4, see Rogers 1999, 1103-1104).
and an appellate court of Type B judges. The sequence of play is as follows (see Figure 1).

1) One of the two factions is elected as the majority faction in the legislature. The majority faction has the option of enacting a policy that allocates the benefit $\beta$ and the cost $\tau$ across the two factions.

2) If the majority enacts a policy, it may be reviewed by a lower court. The probability of lower court review is given by $\phi \in (0,1)$. If reviewed, the lower court may uphold the proposal or veto it. The probability that the lower court is affiliated with faction A is given by $\Pr(T_{LC} = A) = \alpha \in (0,1)$. The legislature does not know which court will be selected (which is technically equivalent to the lower court having private information ex ante regarding its partisan affiliation).

3) If a proposal is reviewed by a lower court, the lower court’s decision is appealed and accepted for review by the appeals court with probability $p \in [0,1]$. The appeals court may uphold the lower court’s verdict or it may reverse it. Without loss of generality, we assume that the probability that the appeals court is affiliated with faction A is given by $\Pr(T_{AC} = A) = r \in (\frac{1}{2},1)$. As in the case of lower courts, we assume that the appeals court’s affiliation is private information ex ante.\textsuperscript{13}

(Figure 1 about here)

As discussed earlier, we make the following assumptions about payoffs. For the legislative factions, payoffs are determined by the share of benefits that accrue to a player’s faction, net of any costs that the player’s faction must bear (either of the tax burden or the legislative transaction costs). Payoffs for the judges also derive from the share of the benefits and costs imposed on the faction to which a judge belongs. Initially, we assume that judges are only motivated by these payoffs, i.e., that they are purely partisan actors. Later, we permit lower court judges to care whether the appellate court reverses their decisions. (Reversal may be professionally embarrassing, have adverse impacts on promotion opportunities, or simply increase a judge’s workload as cases are remanded.) To capture these institutional concerns, we will assume that a “reversal” by the appeals court imposes a cost of $\lambda \geq 0$ on

\textsuperscript{12} There are of course three tiers of courts in the U.S. federal judiciary. We could add a third tier as well, but doing so would complicate the model without providing additional insight.

\textsuperscript{13} For the appeals court, the interpretation that uncertainty over preferences of the court reflects control of a certain number of courts with uncertainty over the court that will hear a case is obviously not available. In this case, the interpretation must be that there is uncertainty over the exact leanings of the court in a particular case. As a result, it seems likely that there would be less uncertainty over the affiliation of the appellate court relative to the lower courts. Moreover, such uncertainty is likely to be low in absolute terms – for example, at the moment, one can be fairly confident that the Supreme Court will take a conservative position, but one may be surprised on occasion.
the lower court. (Thus $\lambda = 0$ corresponds to purely partisan lower court judges.)

The proper solution concept is subgame-perfect equilibrium. This restricts players to employ only “credible” threats. (Thus, for example, a court could not “threaten” to veto a proposal unless it actually has the incentive to do so when confronted with the proposal.) The model yields a unique pure strategy, subgame-perfect equilibrium. We report the equilibrium strategies of each player below. In the next section, we discuss the substantive implications of the equilibrium and comparative statics through a series of propositions.

Consider first the equilibrium strategies of the judicial actors. A faction’s net share of the costs and benefits of a policy is represented by $\Delta_i = \beta_i - \tau_i$, $i \in \{A, B\}$. The lower court’s ruling on the policy is represented by $A_{LC} = \{\text{Uphold, Veto}\}$. The strategy of an appeals court associated with faction $i$ is given by:

$$S_{AC}^i = \begin{cases} 
\text{Uphold if } \Delta_i \geq 0 & A_{LC} = \text{Uphold} \\
\text{Uphold if } \Delta_i \leq 0 & A_{LC} = \text{Veto} \\
\text{Reverse if } \Delta_i > 0 & A_{LC} = \text{Veto} \\
\text{Reverse if } \Delta_i < 0 & A_{LC} = \text{Uphold}
\end{cases}$$

The court can use its position at the top of the judicial hierarchy to prevent any policy that imposes a net cost on its faction from being implemented. It can also ensure the implementation of any policy that provides a net benefit to its faction. (We should stress that the results we derive below do not hinge on uncertainty over the preferences of the appellate court. Lower court indeterminacy is sufficient to generate our conclusions.)

Now consider the strategy of the lower courts. Unlike the appellate court, lower courts must anticipate possible reversals by the higher court. Moreover, the two types of lower court are not in a symmetric position, since the appellate court is more likely to be affiliated with faction A. (Substantively, for example, given the current Supreme Court, a “liberal” lower court must anticipate a greater likelihood
of reversal for its preferred position than a “conservative” lower court.) As a result, we need to differentiate the strategies adopted by judges affiliated with each of the factions. The strategy for a lower court associated with faction A is given by:

$$S^A_{LC} = \begin{cases} 
\text{Uphold if } \Delta_A \geq 0 \\
\text{Uphold if } \Delta_A = 0 & \Delta_B \geq 0 \\
\text{Veto if } \Delta_A < 0 \\
\text{Veto if } \Delta_A = 0 & \Delta_B < 0.
\end{cases}$$

The strategy is simple and intuitive. Because it knows that it is more likely to face an appeals court that shares its preferences than not, a lower court associated with faction A will give free reign to its partisan preferences. The lower court will veto any proposal that imposes a net burden on faction A and uphold any proposal that provides a net benefit.

When a Type B court is purely partisan (i.e., when $\lambda = 0$), then its strategy is equivalent to the strategy of a lower court affiliated with Faction A. But its equilibrium strategy will be more involved when the court cares about the impact of a reversal (i.e., when $\lambda > 0$). In that case, a Type B lower court must consider not only the impact of a given policy on faction B, but also the likely reaction of the appeals court to its decision. The court’s strategy is:

$$S^B_{LC} = \begin{cases} 
\text{Uphold if } \Delta_B \geq 0 & \Delta_A \geq 0 \\
\text{Uphold if } \frac{-\lambda p(2r-1)}{1-p} \leq \Delta_B & \Delta_A > 0 \\
\text{Uphold if } \Delta_B \geq \frac{-\lambda p(2r-1)}{1-p} & \Delta_A \leq 0 \\
\text{Veto if } \Delta_B \leq 0 & \Delta_A < 0 \\
\text{Veto if } \Delta_B < 0 & \Delta_A = 0 \\
\text{Veto if } \Delta_B \leq \frac{-\lambda p(2r-1)}{1-p} & \Delta_A > 0 \\
\text{Veto if } 0 < \Delta_B \leq \frac{-\lambda p(2r-1)}{1-p} & \Delta_A < 0.
\end{cases}$$

\(^{14}\) For convenience, we assume the following tie-breaking rule: If indifferent between vetoing and upholding a proposal, a court will uphold. If indifferent between making a proposal and not making a proposal, a legislative majority will choose to legislate. This assumption has no impact on the substance of the results.
Below we first discuss outcomes when lower courts are purely partisan \((\lambda = 0)\), then discuss when they also have some desire to avoid being overturned on appeal \((\lambda > 0)\).

Finally, we need to consider the strategies that the factions will adopt at the legislative stage. These strategies will reveal how legislative behavior changes in the “shadow of judicial review.” To reduce the visual clutter of equilibrium conditions and to streamline the presentation of results, we restrict attention to the case in which judges act as pure partisans, i.e., are only concerned with the immediate policy goals of their faction \((\lambda = 0)\). Below we discuss the impact of relaxing this assumption (which does not affect the main results reported here). We specify complete equilibrium strategies in the appendix.

The strategy of faction A at the legislative stage is:

\[
S^A_{LM} = \begin{cases} 
\text{No proposal} & \text{if } \beta < \min[\tau + \varepsilon; \frac{\varepsilon}{1 - \phi(1 - \alpha(1 - p) - pr)}] \\
\text{Propose } ((\beta, \tau), (0, 0)) & \text{if } \beta \geq \max[\tau + \varepsilon; \frac{\tau}{\phi(1 - \alpha(1 - p) - pr)}] \\
\text{Propose } \{(\beta, 0), (0, \tau)\} & \text{if } \frac{\tau}{\phi(1 - \alpha(1 - p) - pr)} > \beta \geq \frac{\varepsilon}{1 - \phi(1 - \alpha(1 - p) - pr)}
\end{cases}
\]

The strategy of faction B at the legislative stage is given by:

\[
S^B_{LM} = \begin{cases} 
\text{No proposal} & \text{if } \beta < \min[\tau + \varepsilon; \frac{\varepsilon}{1 - \phi(1 - \alpha(1 - p) + pr)}] \\
\text{Propose } \{(0, 0), (\beta, \tau)\} & \text{if } \beta \geq \max[\tau + \varepsilon; \frac{\tau}{\phi(1 - \alpha(1 - p) + pr)}] \\
\text{Propose } \{(0, \tau), (\beta, 0)\} & \text{if } \frac{\tau}{\phi(1 - \alpha(1 - p) + pr)} > \beta \geq \frac{\varepsilon}{1 - \phi(1 - \alpha(1 - p) + pr)}
\end{cases}
\]

These strategies are illustrated graphically in Figure 2, which plots legislative outcomes in a two-dimensional space defined by the benefits and costs associated with a given policy. In Area I, the factions adopt “non-factious” policies in which the legislative majority allocates the entire benefit to its own faction.
faction but also assumes the tax cost of the project. In Areas III and IV, legislative majorities do not adopt any policy at all. In Areas IIa and IIb, the factions adopt factious policies that place the tax burden of policies on the non-benefited minority.

Figure 2 is generic in the sense that it shows the general partition of the policy space by the legislative strategies. While the relative position and general shape of the boundaries that separate the various areas does not change, the location of the boundaries depends on the model’s parameters and differs across factions A and B. The boundaries \( T_i^A \) and \( T_i^B \), \( i \in \{A, B\} \), are given by the equilibrium conditions:

\[
\begin{align*}
T_i^A &= \frac{\tau}{\phi(1 - \alpha(1 - p) - pr)} \\
T_i^B &= \frac{\tau}{\phi(1 - \alpha(1 - p) + pr)} \\
T_2^A &= \frac{\epsilon}{1 - \phi(1 - \alpha(1 - p) - pr)} \\
T_2^B &= \frac{\epsilon}{1 - \phi(1 - \alpha(1 - p) + pr)}.
\end{align*}
\]

We now turn to a substantive discussion of these results and their significance.

**Part III. Discussion**

Above we developed a model of legislative-judicial interaction in which both legislators and judges are narrowly political – both pursue “factious” policies in the classic Madisonian sense. The model reflects two main complaints advanced by critics against *Lochner*’s major premise. First, judges freely substitute their personal political preferences for those of the legislature. Secondly, judicial decisions are *ex ante* indeterminate. The model generates several results of interest. First, and most directly, it describes how legislative policy outcomes under a Lochnerian regime of judicial review differ from policy outcomes under a regime without effective judicial review. Secondly, the results help us more broadly to understand how judicial review influences legislative behavior. As we will see, the mere threat of the
judicial veto induces the legislature to alter its enactments. This largely unobserved, “passive” effect of judicial review (Brace and Langer 2001) is at least as important as the “active” effect of judicial review when courts actually deploy their judicial veto.

Lochnerian review can improve policy outcomes relative to deferential review in two ways. First, minority groups are always (weakly) better off with Lochnerian review than with deferential review. Secondly, and perhaps more surprisingly, Lochnerian review can improve social welfare relative to deferential review. This second result is the more surprising of the two because the Progressive/Realist complaint against *Lochner* was that when judges substitute their personal policy preferences for those of legislative majorities, the judges stymie the ability of society to secure its more preferred policies. This is an implicit appeal to a welfare or efficiency criterion (see, e.g., Rogers 1999). Indeed, without this implicit appeal, the separation-of-power objection to *Lochner* reduces to little more than formalism. To be sure, the efficiency result we demonstrate below is what Lochnerian review “can” do, not necessarily what it “will” do. But the possibility that the application of judicial review by utterly unprincipled judges can improve social efficiency merely because of the way the judiciary interacts with the legislature is a result that has largely gone unrecognized in the literature on separation-of-power systems.

Before turning to these results, we should briefly revisit the results of the baseline model. Without effective judicial review, legislative majorities in the baseline model enact factious policies that reserve the entire benefit of the policies for their own faction and impose the entire burden on the minority. Looking at Figure 2, legislative majorities enact factious policies in areas I, Ila, IIb, and III. Moreover, the policies falling within areas IIb and III are inefficient in the sense that the tax cost of the policy outweighs its benefits. Politics in the baseline model exhibits two central aspects of factious action. First, the legislature enacts policies that reserve the benefit of those policies for the majority while forcing the minority to assume their cost. Secondly, the legislature enacts policies that burden minorities without even providing a corresponding advantage to the majority.

We are now in a position to compare how the addition of Lochnerized judicial review impacts legislative behavior.
**Proposition 2:** Adding judicial review by Lochernized judges to the legislative process results in the following changes in legislative outcomes relative to the baseline model:

A. In Region I, legislative majorities enact non-factious instead of factious policies.

B. In Region IIa and IIb, legislative factions continue to enact factious policies, but those factious policies may be struck down during the judicial review process. If faction A is the legislative majority, the probability that its policy will be struck down is

\[
\Pr(\text{Veto} | \text{Proposal by A}) = \phi(1 - \alpha(1 - p) - pr).
\]

If faction B is the majority, the probability that a proposal by faction B will be struck down is

\[
\Pr(\text{Veto} | \text{Proposal by B}) = \phi(\alpha(1 - p) + pr).
\]

C. In Region III, legislative majorities enact no policy instead of factious policies.

Proposition 2 reports several interesting outcomes. First, the minority faction is always better off with Lochnerian review than without it. In Regions I and III, the minority faction is strictly better off because the majority faction no longer burdens the minority with the cost of the policies it enacts. In Region II, the minority is better off because factious policies that are imposed on it with certainty without judicial review, are now struck down by the courts with positive probability. For both factions, the proportion of factious proposals struck down in regions IIa and IIb increases in \(\phi\). That is, more vigorous review by lower courts increases the degree of “minority protection” for both factions. The other parameters, not surprisingly, have opposite effects on the two factions. Increasing the likelihood that lower courts or the appeals court are controlled by one of the factions always benefits that faction.

A second noteworthy outcome reported in the Proposition is that the influence of judicial review stems from an “active” as well as a “passive” component. The changed policy choices made by the legislature in Regions I and III represents the “passive” influence of judicial review. In these regions, legislative majorities respond to the mere threat of judicial review and either choose to enact non-factious policies – policies that all types of judges will affirm – or simply choose to forgo enacting a policy at all (hence, there is nothing for a judge to strike down). In these regions the courts do not need to act because the mere possibility of judicial review deters legislative majorities from taking actions that a court would veto. But despite the lack of observable judicial intervention, the institution of judicial review exercises an enormous influence over legislative outcomes in these areas. Regions IIa and IIb, on the other hand, illustrate the active influence of judicial review. Legislative majorities enact a factious policy that will be
struck down with a given probability.

A first, unambiguous conclusion we can thus draw is that the addition of “Lochnerized” judicial review will always improve equity – in the sense of protecting minorities against the imposition of costs without a corresponding benefit by legislative majorities – relative to a deferential judicial regime. This is stated in the following proposition.

**Proposition 3.** As long as the judiciary includes some members of the legislature’s minority faction, judicial review will always decrease the burden imposed on the minority faction by the legislature.

We next consider the impact of Lochnerian review on the efficiency of the policies that the legislature enacts. The surprising answer is that Lochnerian review can improve the overall social efficiency of policy outcomes.\(^{15}\) We characterize the result as follows.

**Proposition 4:** The passive influence of Lochnerian review preserves the efficiency of the most efficient policies that legislatures will enact while simultaneously protecting the minority from bearing the cost burden of those efficient policies. Judicial review also deters enactment of the most inefficient policies, an outcome that simultaneously protects the minority from bearing the cost burden of those inefficient policies.

Policies in Region I of Figure 2 are always efficient. Indeed, they are the most efficient policies in the benefit-cost space. Judicial review does not affect the inclination of legislative majorities to enact these policies. Rather, it only affects the distribution of costs and benefits by inducing the majority faction to assume the cost rather than to burden the minority faction. The majority would rather assume the cost of the policy itself than risk its (probabilistic) veto by a judge. This is very good news: In this region, judicial review can increase equity without decreasing social efficiency. The news is almost as good in Region III. All of the policies enacted in Region III are highly inefficient. The legislature will enact these inefficient policies in a deferential judicial regime (because it would impose the cost on the legislative minority) but will forgo their enactment in an activist judicial regime to avoid wasting legislative resources on a policy that risks a (probabilistic) judicial veto. So, again, both equity and efficiency are served by judicial review in Region III.

While the impact of judicial review is clear in regions I and III, its impact in regions IIa and IIb is
ambiguous. Whether judicial review improves overall social efficiency in this region depends on the proportion of policies struck down in Region IIa (where policies are efficient) to the number of policies struck down in Region IIb (where policies are inefficient). Overall efficiency is improved if policies are sufficiently likely to be inefficient. If, on the other hand, policies are sufficiently likely to be efficient, judicial review may lower efficiency overall as efficient, factious policies are struck down in the review process.\footnote{16}

Beyond the substantive results pertaining to how Lochnerian review affects policy outcomes and legislative behavior, we report several comparative statics results that describe how the boundaries in Figure 2 shift with changes of key parameters in the analysis.

**Proposition 5:** An increase in the likelihood of lower court review, $\phi$, increases efficiency and equity.

As $\phi$ increases, the boundary $T_i^2$ shifts upwards for both factions. In other words, legislative majorities become more reluctant to adopt inefficient policies and instead choose to forego legislating at a higher rate. An increase in $\phi$ also shifts down the boundary $T_i^1$ and decreases its slope. That is, legislative majorities become more willing to assume the costs of highly beneficial policies by adopting non-factious legislation rather than to burden the minority faction. The cumulative effect of an increase in $\phi$ is therefore to increase Areas I and III at the expense of Areas IIa and IIb – a clear gain in equity and efficiency.

**Proposition 6:** Changes in the likelihood that Faction A predominates at the lower court and at the appeals court level, $\alpha$ or $r$, have opposite effects on Factions A and B. An increase in these parameters encourages faction B to become less factious, but leads faction A to be more factious. Decreases in these parameters have the opposite effect.

Graphically, increases in $\alpha$ or $r$ decrease Areas IIa and IIb for Faction B and increase areas I and III. For Faction A, the impact is the opposite: an increase in $\alpha$ or $r$ decreases Areas I and III and increases areas

\footnote{15 In this discussion we are considering Kaldor-Hicks efficiency.}

\footnote{16 We should nonetheless note that even if there is a decrease in efficiency as a policy in Region IIa is struck down, judicial review still works “correctly” in an important sense. The policies that are struck down, while efficient, are highly factious and impose a burden on non-benefited minorities to secure a benefit to a legislative majority.}
IIa and IIb. This suggests an important trade-off: increasing judicial control for a particular faction will encourage other factions to be more attuned to the political interests of the faction that enjoys strong judicial support. But it will lessen the incentives for this faction to consider the interests of judicially “underrepresented groups.” The key to encouraging universal restraint via judicial review lies precisely in the heterogeneity of the judiciary. Values of $\alpha$ and $r$ close to $\frac{1}{2}$ are most likely to strike a balance between the two factions that encourages each not to engage in the kinds of factious policy-making that Madison identified in *Federalist 10.*

Importantly, *it is the decisional indeterminacy that politically-motivated judges create and which opponents of *Lochner* decry that is the driving force behind the moderating influence that judicial review has on otherwise factious policy outcomes.* As long as legislative majorities face a sufficient prospect that a heterogeneous judiciary will scrutinize their proposals, there exist strong incentives to forego factious policy-making and to reduce the number of inefficient policies.

Consider the broader implications of the results discussed so far. In our model, all of the judges are acting in a narrowly partisan, factious manner – they seek only to advance their faction’s interests. Yet despite their specific intentions, the diffuse institutional arrangement of the lower courts results in a sort of “invisible hand” effect: even though no individual judge intends it, an activist, partisan judiciary promotes important goals of American constitutionalism better than a deferential judiciary. “Activist” judicial review promotes efficiency and equity in regions where deferential review would result in inefficiency and inequity. Further, in the region in which efficiency might be sacrificed (and it is possible that efficiency is enhanced in this region as well), partisan judicial review still prevents legislative majorities from burdening minorities with the costs of policies that do not benefit the minorities.

This suggests that important factual predicates of traditional criticisms of *Lochner* need to be

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17 A remaining comparative statics we result we have not treated concerns the impact of the likelihood of successful appeal, $p$. As in the case of $\alpha$ and $r$, the impact of this parameter pulls in opposite directions for the two factions.
revised. “Activist” Lochnerian review actually deters relative little legislative activity (and only the unambiguously worst legislation – the most inefficient and inequitable legislation – at that). While Lochnerian review obviously result in the veto of more legislation than does deferential review, legislative majorities face strong incentives to restructure legislation and to assume the costs of policies that benefit their factions in order to avoid a successful judicial challenge. Further, of the remaining legislation, courts veto only those policies in which majority factions attempt exclusively to appropriate the benefits of a policy for itself while imposing the cost of those policies on minorities.

At the same time, there is a balance to be struck in achieving these results. While decentralized, Lochnerian review encourages legislative moderation for all factions, the incentives to enact moderate policies decline as a faction controls a higher proportion of the judiciary. In this sense, the sin of the Lochner-era judiciary may not have been political judging, but rather that the lower courts were insufficiently diffuse in their factional commitments to generate recognizably fair and efficient results.

Conclusion

Barry Friedman recently concluded a five-part series on the intellectual history of the “countermajoritarian difficulty” by challenging scholars to focus on the real impact of judicial review rather than remaining fixated on the abstract consistency of judicial review with democratic decision making. We care about democratic processes not as abstract procedures but because they serve other human ends. Therefore, Friedman argued, scholars should “undertake to assess realistically whether judicial review is a net gain or loss for values we hold dear, be they economic growth and security, individual liberty, or equality. Stated differently, is judicial review worth it when we deplore particular results?” (2002b, 257).

The decision in *Lochner* itself, and many of the decisions spawned by *Lochner*, may be “deplorable” when considered discretely. In the model developed above, *every* use of the judicial veto is

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18 This result is reminiscent of de Figueiredo’s (2002) argument that electoral uncertainty can induce “cooperative” behavior among parties who agree to insulate each others’ policies against repeal. As he shows, such behavior is only sustainable if electoral uncertainty is sufficiently high, i.e., if parties are sufficiently balanced.
deplorable in the sense that it is utterly unprincipled and stymies a majoritarian outcome. But as Friedman’s appeal emphasizes, the appropriate level for evaluating judicial review as an institution is to consider it as part of a system of institutional interaction and to assess its impact on policy outcomes in the aggregate instead of focusing on discrete decisions. It is in this sense that the analysis we developed above suggests a defense of Lochner’s “major premise.” In something reminiscent of an “invisible hand” process, the separation-of-power system can aggregate the narrowly self-interested, doctrinally indeterminate judicial decisions of a Lochnerian judiciary into outcomes better than those produced by a judiciary that habitually defers to legislative policies and provides no effective review of those policies.

Paradoxically, the beneficial effect of Lochnerian review is the result of a primary vice attributed to the decision: legal indeterminacy. It is precisely the uncertainty introduced into the legislative arena by the unprincipled decision-making of politically-motivated judges that induces legislators to shift legislative outputs towards more equitable and efficient legislation. Putting this point differently, our results highlight the important impact of what Brace and Langer term the “passive” effect of judicial review (2001). Judicial review does not influence legislative outcomes only when judges strike down legislation. Rather, the relationship between the two institutions constructs a strategic environment that influences the substantive form of policies enacted in the first place. In the model developed above, judicial review results in more equitably distributed legislation and, under plausible circumstances, more efficient legislation than would be enacted without judicial review. Judicial review has an effect even when legislation is not challenged or struck down. Hence, the influence of the judicial veto in separation-of-power systems – whether approached theoretically or empirically – cannot be understood by considering only laws which are actually challenged or laws that are struck down.

Finally, our results also underscore that scholars should not study the Supreme Court in isolation from the lower courts. Given that the Supreme Court can only imperfectly monitor the decisions of lower courts, studies of the Lochner era need to consider the ideological diversity of the lower courts during that period. The lessons on that score extend beyond the Lochner era, suggesting additional avenues for examining the influence of judicial review in the current era as well.
Appendix

(This long version is intended for the referees. We will provide an truncated appendix for the final paper.)

**Tie-Break Rule:** A court will uphold a proposal if indifferent between vetoing and upholding. If indifferent, the legislative majority will make a proposal.

1) **Appeals court stage:**

At this stage, the appeals court will veto any proposal that imposes a net cost on its faction and uphold any proposal that provides a net benefit to its faction. Formally, let $\Delta_i = \beta_i - \tau_i$ denote the net share of benefits and costs imposed on faction $i \in \{A, B\}$ under the original legislative proposal and let $A_{LC} \in \{\text{Uphold, Veto}\}$ denote the lower court ruling on the proposal. Then it is immediate that the strategy for each type of appeals court is given by:

$$S_{AC}^A = \begin{cases} 
\text{Uphold} & \text{if } \Delta_A \geq 0 \& A_{LC} = \text{Uphold} \\
\text{Uphold} & \text{if } \Delta_A \leq 0 \& A_{LC} = \text{Veto} \\
\text{Reverse} & \text{if } \Delta_A > 0 \& A_{LC} = \text{Veto} \\
\text{Reverse} & \text{if } \Delta_A < 0 \& A_{LC} = \text{Uphold}
\end{cases}$$

$$S_{AC}^B = \begin{cases} 
\text{Uphold} & \text{if } \Delta_B \geq 0 \& A_{LC} = \text{Uphold} \\
\text{Uphold} & \text{if } \Delta_B \leq 0 \& A_{LC} = \text{Veto} \\
\text{Reverse} & \text{if } \Delta_B > 0 \& A_{LC} = \text{Veto} \\
\text{Reverse} & \text{if } \Delta_B < 0 \& A_{LC} = \text{Uphold}
\end{cases}$$

2) **Lower court stage:**

**Case 2a: Lower court is associated with Faction A**

There are six possible scenarios that the lower court can confront:

i) $\Delta_A \geq 0 \& \Delta_B \geq 0$

For this case, the court has a dominant strategy to uphold.

ii) $\Delta_A < 0 \& \Delta_B < 0$

For this case, the court has a dominant strategy to veto.

iii) $\Delta_A < 0 \& \Delta_B = 0$

For this case, the court has a dominant strategy to veto.

iv) $\Delta_A = 0 \& \Delta_B < 0$

For this case, the court has a dominant strategy to veto.

v) $\Delta_A > 0 \& \Delta_B < 0$
Vetoing this proposal carries the threat of a reversal by an A court. Upholding it carries the possibility of a reversal by a B court. The expected utilities are given by:

\[ EU_{LC}^A(\text{Uphold}) = (1 - p(1 - r))\Delta_A - p(1 - r)\lambda \]
\[ EU_{LC}^A(\text{Veto}) = pr(\Delta_A - \lambda) \]

Thus, the lower court will uphold iff:

\[ (1 - p(1 - r))\Delta_A - p(1 - r)\lambda \geq pr(\Delta_A - \lambda) \]
\[ \iff \Delta_A \geq \frac{-p\lambda(2r - 1)}{1 - p} \]

Given that \( \Delta_A > 0 \), this condition is always satisfied for \( r \in \left[ \frac{1}{2}, 1 \right] \). So in this case, the court has a dominant strategy to uphold.

vi) \( \Delta_A < 0 \) & \( \Delta_B > 0 \)

Vetoing this proposal carries the risk of reversal by a B court. Upholding it carries the risk of reversal by an A court. The expected utilities are given by:

\[ EU_{LC}^A(\text{Uphold}) = (1 - pr)\Delta_A - pr\lambda \]
\[ EU_{LC}^A(\text{Veto}) = p(1 - r)(\Delta_A - \lambda) \]

Thus, the lower court will uphold iff:

\[ (1 - pr)\Delta_A - pr\lambda \geq p(1 - r)(\Delta_A - \lambda) \]
\[ \iff \Delta_A \geq \frac{p\lambda(2r - 1)}{1 - p} \]

Given that \( \Delta_A < 0 \), this condition cannot be satisfied for \( r \in \left[ \frac{1}{2}, 1 \right] \). So in this case, the court has a dominant strategy to veto.

Thus, the strategy for a lower court associated with faction A is given by:

\[ S_{LC}^A = \begin{cases} 
\text{Uphold if } \Delta_A > 0 \\
\text{Uphold if } \Delta_A = 0 \text{ & } \Delta_B \geq 0 \\
\text{Veto if } \Delta_A < 0 \\
\text{Veto if } \Delta_A = 0 \text{ & } \Delta_B < 0 
\end{cases} \]

Case 2b: Lower court is associated with Faction B

There are six possible scenarios that the lower court can confront:

i) \( \Delta_A \geq 0 \) & \( \Delta_B \geq 0 \)

For this case, the court has a dominant strategy to uphold.
ii) $\Delta_A < 0 \& \Delta_B < 0$
For this case, the court has a dominant strategy to veto.

iii) $\Delta_A < 0 \& \Delta_B = 0$
For this case, the court has a dominant strategy to veto.

iv) $\Delta_A = 0 \& \Delta_B < 0$
For this case, the court has a dominant strategy to veto.

v) $\Delta_A > 0 \& \Delta_B < 0$
Vetoing this proposal carries the threat of a reversal by an A court. Upholding it carries the possibility of a reversal by a B court. The expected utilities are given by:

$$EU_{LC}^B(\text{Uphold}) = (1 - p(1 - r))\Delta_B - p(1 - r)\lambda$$
$$EU_{LC}^A(\text{Veto}) = pr(\Delta_B - \lambda)$$

Thus, the lower court will uphold iff:
$$(1 - p(1 - r))\Delta_B - p(1 - r)\lambda \geq pr(\Delta_B - \lambda)$$
$$\iff \Delta_B \geq \frac{-p\lambda(2r - 1)}{1 - p}$$

Given that $\Delta_B < 0$, this condition may or may not be satisfied for $r \in \left[\frac{1}{2}, 1\right]$.

vi) $\Delta_A < 0 \& \Delta_B > 0$
Vetoing this proposal carries the risk of reversal by a B court. Upholding it carries the risk of reversal by an A court. The expected utilities are given by:

$$EU_{LC}^B(\text{Uphold}) = (1 - pr)\Delta_B - pr\lambda$$
$$EU_{LC}^B(\text{Veto}) = p(1 - r)(\Delta_B - \lambda)$$

Thus, the lower court will uphold iff:
$$(1 - pr)\Delta_B - pr\lambda \geq p(1 - r)(\Delta_B - \lambda)$$
$$\iff \Delta_B \geq \frac{p\lambda(2r - 1)}{1 - p}$$

Given that $\Delta_B > 0$, this condition may or may not be satisfied for $r \in \left[\frac{1}{2}, 1\right]$.

The strategy for a lower court associated with faction B is therefore given by:

$$S_{LC}^B = \begin{cases} 
\text{Uphold if } \Delta_B \geq 0 \& \Delta_A \geq 0 \\
\text{Uphold if } \frac{-\lambda p(2r - 1)}{1 - p} \leq \Delta_B < 0 \& \Delta_A > 0 \\
\text{Uphold if } \Delta_B \geq \frac{\lambda p(2r - 1)}{1 - p} \& \Delta_A < 0 \\
\text{Veto if } \Delta_B \leq 0 \& \Delta_A < 0 \\
\text{Veto if } \Delta_B < 0 \& \Delta_A = 0 \\
\text{Veto if } \Delta_B < \frac{-\lambda p(2r - 1)}{1 - p} \& \Delta_A > 0 
\end{cases}$$

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3) The legislative stage:

Case 3a: Faction A controls the legislative process:

A must consider several possible courses of action.

a) It could make no proposal at all.

b) It could make a proposal for which $\Delta_A \leq 0$. Such a proposal is always dominated by making no proposal at all and therefore we don’t need to consider it.

c) It could propose $\Delta_A > 0$ and $\Delta_B = 0$. This proposal would be upheld by all lower courts and appeals courts.

d) It could propose $\Delta_A > 0$ and $\Delta_B = \frac{-\lambda p(2r-1)}{1-p}$. This proposal will be upheld by all lower courts, but will be quashed by a B appeals court.

e) It could propose $\Delta_A > 0$ and $\Delta_B < \frac{-\lambda p(2r-1)}{1-p}$. This proposal will be vetoed by a B lower court and upheld by an A lower court. It will be quashed by B appeals court and implemented by an A appeals court.

Define a project as “cheap” whenever $\tau \leq \frac{\lambda p(2r-1)}{1-p}$. (Note that “cheap” is relative to the B court’s costs and risks of an overturn. It does not mean that the project is “cheap” in an absolute sense or even that the project is efficient.) This threshold increases as the cost of an overturn increases for lower courts and it also increases as the likelihood of a successful appeal increases.

Subcase 3ai: The project is “cheap” (i.e., $\tau \leq \frac{\lambda p(2r-1)}{1-p}$)

In this case, B lower court judges will uphold a proposal that places the entire burden on B. There are therefore three options A must consider:

i) No proposal at all

ii) The nonfactious proposal: $\{(\beta, \tau), (0,0)\}$

iii) The unrestrained proposal: $\{(\beta, 0), (0,\tau)\}$

The expected utilities of each action are given by:

$\text{EU}_{LM}^A$ (No proposal) = 0
\[EU^A_LM \text{ (Non-factious)} = \beta - \tau - \epsilon\]
\[EU^A_LM \text{ (Unrestrained)} = (1 - \phi p(1 - r))\beta - \epsilon\]

**A will make no proposal iff:**
\[EU^A_LM \text{ (No proposal)} > EU^A_LM \text{ (Nonfactious)}\]
\[\iff\]
\[\beta < \tau + \epsilon\]

\[EU^A_LM \text{ (No proposal)} > EU^A_LM \text{ (Unrestrained)}\]
\[\iff\]
\[0 > (1 - \phi p(1 - r))\beta - \epsilon\]
\[\iff\]
\[\beta < \frac{\epsilon}{1 - \phi p(1 - r)}\]

**A will make the nonfactious proposal iff:**
\[EU^A_LM \text{ (Nonfactious)} \geq EU^A_LM \text{ (No proposal)}\]
\[\iff\]
\[\beta \geq \tau + \epsilon\]

\[EU^A_LM \text{ (Nonfactious)} \geq EU^A_LM \text{ (Unrestrained)}\]
\[\iff\]
\[\beta - \tau - \epsilon \geq (1 - \phi p(1 - r))\beta - \epsilon\]
\[\iff\]
\[\beta \geq \frac{\tau}{\phi p(1 - r)}\]

**A will make the unrestrained proposal iff:**
\[EU^A_LM \text{ (Unrestrained)} \geq EU^A_LM \text{ (No proposal)}\]
\[\iff\]
\[\beta \geq \frac{\epsilon}{1 - \phi p(1 - r)}\]

\[EU^A_LM \text{ (Unrestrained)} > EU^A_LM \text{ (Nonfactious)}\]
\[\iff\]
\[(1 - \phi p(1 - r))\beta - \epsilon > \beta - \tau - \epsilon\]
\[\iff\]
\[\beta < \frac{\tau}{\phi p(1 - r)}\]
Subcase 3aii: The project is not “cheap” (i.e., $\tau > \frac{\lambda p(2r-1)}{1-p}$)

In this case, B lower court judges will veto a proposal that places the entire burden on B. There are therefore four options A must consider:

i) No proposal at all
ii) The nonfactious proposal: $\{(\beta, \tau), (0,0)\}$
iii) The restrained proposal (will be upheld by B lower court judges):
\[
\{(\beta, \tau - \frac{\lambda p(2r-1)}{1-p}), (0, \frac{\lambda p(2r-1)}{1-p})\}
\]
iv) The unrestrained proposal: $\{(\beta,0), (0,\tau)\}$

The expected utilities of each action are given by:
\[
EU_{LM}^A \text{(No proposal)} = 0
\]
\[
EU_{LM}^A \text{(Nonfactious)} = \beta - \tau - \epsilon
\]
\[
EU_{LM}^A \text{(Restrained)} = (1 - \phi p(1-r))(\beta - \tau + \frac{\lambda p(2r-1)}{1-p}) - \epsilon
\]
\[
EU_{LM}^A \text{(Unrestrained)} = (1 - \phi(1 - \alpha(1 - p) - pr))\beta - \epsilon
\]

**A will make no proposal iff:**
\[
EU_{LM}^A \text{(No proposal)} > EU_{LM}^A \text{(Nonfactious)}
\]
\[
\Leftrightarrow
\]
\[
\beta < \tau + \epsilon
\]

**A will make the nonfactious proposal iff:**
\[
EU_{LM}^A \text{(No proposal)} > EU_{LM}^A \text{(Unrestrained)}
\]
\[
\Leftrightarrow
\]
\[
0 > (1 - \phi(1 - \alpha(1 - p) - pr))\beta - \epsilon
\]
\[
\Leftrightarrow
\]
\[
\beta < \frac{\epsilon}{1 - \phi(1 - \alpha(1 - p) - pr)}
\]

**A will make the restrained proposal iff:**
\[
EU_{LM}^A \text{(No proposal)} > EU_{LM}^A \text{(Restrained)}
\]
\[
\Leftrightarrow
\]
\[
0 > (1 - \phi p(1-r))(\beta - \tau + \frac{\lambda p(2r-1)}{1-p}) - \epsilon
\]
\[
\Leftrightarrow
\]
\[
\beta < \tau - \frac{\lambda p(2r-1)}{1-p} + \frac{\epsilon}{1 - \phi p(1-r)}
\]

**A will make the unrestrained proposal iff:**
\( EU^A_{LM} \) (Nonfactious) \( \succeq \) \( EU^A_{LM} \) (No proposal)
\[ \iff \]
\[ \beta \geq \tau + \varepsilon \]

\( EU^A_{LM} \) (Nonfactious) \( \succeq \) \( EU^A_{LM} \) (Unrestrained)
\[ \iff \]
\[ \beta - \tau - \varepsilon \geq (1 - \phi(1 - \alpha(1 - p) - pr))\beta - \varepsilon \]
\[ \iff \]
\[ \beta \geq \frac{\tau}{\phi(1 - \alpha(1 - p) - pr)} \]

\( EU^A_{LM} \) (Nonfactious) \( \succeq \) \( EU^A_{LM} \) (Restrained)
\[ \iff \]
\[ \beta - \tau - \varepsilon \geq (1 - \phi p(1 - r))(\beta - \tau + \frac{\lambda p(2r - 1)}{1 - p}) - \varepsilon \]
\[ \iff \]
\[ \beta \geq \tau - \frac{\lambda p(2r - 1)}{1 - p} + \frac{\lambda(2r - 1)}{\phi(1 - p)(1 - r)} \]

A will make the restrained proposal iff:
\[ EU^A_{LM} \] (Restrained) \( \succeq \) \( EU^A_{LM} \) (No proposal)
\[ \iff \]
\[ \beta \geq \tau - \frac{\lambda p(2r - 1)}{1 - p} + \frac{\varepsilon}{1 - \phi p(1 - r)} \]

\( EU^A_{LM} \) (Restrained) \( \succ \) \( EU^A_{LM} \) (Nonfactious)
\[ \iff \]
\[ (1 - \phi p(1 - r))\beta - \varepsilon > \beta - \tau - \varepsilon \]
\[ \iff \]
\[ \beta < \tau - \frac{\lambda p(2r - 1)}{1 - p} + \frac{\lambda(2r - 1)}{\phi(1 - p)(1 - r)} \]

\( EU^A_{LM} \) (Restrained) \( \succeq \) \( EU^A_{LM} \) (Unrestrained)
\[ \iff \]
\[ (1 - \phi p(1 - r))(\beta - \tau + \frac{\lambda p(2r - 1)}{1 - p}) - \varepsilon \geq (1 - \phi(1 - \alpha(1 - p) - pr))\beta - \varepsilon \]
\[ \iff \]
\[ \beta \geq \frac{(1 - \phi p(1 - r))}{\phi(1 - \alpha)(1 - p)}(\tau - \frac{\lambda p(2r - 1)}{1 - p}) \]
A will make the unrestrained proposal iff:

\[ EU_{LM}^A (Unrestrained) \geq EU_{LM}^A (No\ proposal) \]

\[ \Leftrightarrow \]

\[ \beta \geq \frac{\varepsilon}{1 - \phi(1 - \alpha(1 - p) - pr)} \]

\[ EU_{LM}^A (Unrestrained) > EU_{LM}^A (Nonfactual) \]

\[ \Leftrightarrow \]

\[ \beta < \frac{\tau}{\phi(1 - \alpha(1 - p) - pr)} \]

\[ EU_{LM}^A (Unrestrained) > EU_{LM}^A (Restrained) \]

\[ \Leftrightarrow \]

\[ \beta < \frac{(1 - \phi p)(1 - r)}{\phi(1 - \alpha)(1 - p)}(\tau - \frac{\lambda p(2r - 1)}{1 - p}) \]

Thus, faction A’s legislative strategy when the project is “cheap” (\( \tau \leq \frac{\lambda p(2r - 1)}{1 - p} \)) is given by:

\[
S_{LM}^A = \begin{cases} 
\text{No proposal if } \beta < \min[\tau + \varepsilon, \frac{\varepsilon}{1 - \phi p(1 - r)}] \\
\text{Propose } \{(\beta, \tau), (0,0)\} \text{ if } \beta \geq \max[\tau + \varepsilon, \frac{\tau}{\phi p(1 - r)}] \\
\text{Propose } \{(\beta, 0), (0, \tau)\} \text{ if } \frac{\tau}{\phi p(1 - r)} > \beta \geq \frac{\varepsilon}{1 - \phi p(1 - r)} 
\end{cases}
\]

Faction A’s legislative strategy when the project is not “cheap” (\( \tau > \frac{\lambda p(2r - 1)}{1 - p} \)) is given by:
The expected utilities of each action are given by:

\[ EU_{L,M}^B (\text{No proposal}) = 0 \]
\[ EU_{L,M}^B (\text{Non-factious}) = \beta - \tau - \epsilon \]
\[ EU_{L,M}^B (\text{Unrestrained}) = (1 - \phi(\alpha(1 - p) + pr))\beta - \epsilon \]
B will make no proposal iff:
\[ EU_{LM}^B (\text{No proposal}) > EU_{LM}^B (\text{Nonfactious}) \]
\[ \iff \beta < \tau + \varepsilon \]
\[ EU_{LM}^B (\text{No proposal}) > EU_{LM}^B (\text{Unrestrained}) \]
\[ \iff 0 > (1 - \phi(\alpha(1 - p) + pr))\beta - \varepsilon \]
\[ \iff \beta < \frac{\varepsilon}{1 - \phi(\alpha(1 - p) + pr)} \]

B will make the nonfactious proposal iff:
\[ EU_{LM}^B (\text{Nonfactious}) \geq EU_{LM}^B (\text{No proposal}) \]
\[ \iff \beta \geq \tau + \varepsilon \]
\[ EU_{LM}^B (\text{Nonfactious}) \geq EU_{LM}^B (\text{Unrestrained}) \]
\[ \iff \beta - \tau - \varepsilon \geq (1 - \phi(\alpha(1 - p) + pr))\beta - \varepsilon \]
\[ \iff \beta \geq \frac{\tau}{\phi(\alpha(1 - p) + pr)} \]

B will make the unrestrained proposal iff:
\[ EU_{LM}^B (\text{Unrestrained}) \geq EU_{LM}^B (\text{No proposal}) \]
\[ \iff \beta \geq \frac{\varepsilon}{1 - \phi(\alpha(1 - p) + pr)} \]
\[ EU_{LM}^B (\text{Unrestrained}) > EU_{LM}^B (\text{Nonfactious}) \]
\[ \iff (1 - \phi(\alpha(1 - p) + pr))\beta - \varepsilon > \beta - \tau - \varepsilon \]
\[ \iff \beta < \frac{\tau}{\phi(\alpha(1 - p) + pr)} \]
Subcase 3bii: The project does not have a “large payoff” (i.e., \( \beta < \frac{\lambda p(2r - 1)}{1 - p} \))

In this case, B lower court judges will veto the factious proposal. There are therefore three options B must consider:

i) No proposal at all
ii) The nonfactious proposal: \{ (0, 0), (\beta, \tau) \}
iii) The unrestrained proposal: \{ (0, \tau), (\beta, 0) \}

The expected utilities of each action are given by:

\[
EU^A_{LM} (\text{No proposal}) = 0
\]

\[
EU^A_{LM} (\text{Nonfactious}) = \beta - \tau - \varepsilon
\]

\[
EU^A_{LM} (\text{Unrestrained}) = (1 - \phi(1 - p(1 - r))) \beta - \varepsilon
\]

**B will make no proposal iff:**

\[
EU^B_{LM} (\text{No proposal}) > EU^B_{LM} (\text{Nonfactious})
\]

\[
\iff \beta < \tau + \varepsilon
\]

\[
EU^B_{LM} (\text{No proposal}) > EU^B_{LM} (\text{Unrestrained})
\]

\[
\iff 0 > (1 - \phi(1 - p(1 - r))) \beta - \varepsilon
\]

\[
\iff \beta < \frac{\varepsilon}{1 - \phi(1 - p(1 - r))}
\]

**B will make the nonfactious proposal iff:**

\[
EU^B_{LM} (\text{Nonfactious}) \geq EU^B_{LM} (\text{No proposal})
\]

\[
\iff \beta \geq \tau + \varepsilon
\]

\[
EU^B_{LM} (\text{Nonfactious}) \geq EU^B_{LM} (\text{Unrestrained})
\]

\[
\iff \beta - \tau - \varepsilon \geq (1 - \phi(1 - p(1 - r))) \beta - \varepsilon
\]

\[
\iff \beta \geq \frac{\tau}{\phi(1 - p(1 - r))}
\]

**B will make the unrestrained proposal iff:**
\[ EU^B_{LM} \text{ (Unrestrained)} \geq EU^B_{LM} \text{ (No proposal)} \]
\[ \iff \beta \geq \frac{\varepsilon}{1 - \phi(1 - p(1 - r))} \]

\[ EU^B_{LM} \text{ (Unrestrained)} > EU^B_{LM} \text{ (Nonfactious)} \]
\[ \iff \beta < \frac{\tau}{\phi(1 - p(1 - r))} \]

Thus, faction B’s legislative strategy when the project has a “large payoff” \( (\beta \geq \frac{\lambda p(2r - 1)}{1 - p}) \) is given by:

\[
S^B_{LM} = \begin{cases} 
\text{No proposal if } \beta < \min[\tau + \varepsilon, \frac{\varepsilon}{1 - \phi(\alpha(1 - p) + pr)}] \\
\text{Propose } \{(0,0), (\beta, \tau)\} \text{ if } \beta \geq \max[\tau + \varepsilon, \frac{\tau}{\phi(\alpha(1 - p) + pr)}] \\
\text{Propose } \{(0,\tau), (\beta, 0)\} \text{ if } \frac{\tau}{\phi(\alpha(1 - p) + pr)} > \beta \geq \frac{\varepsilon}{1 - \phi(\alpha(1 - p) + pr)} 
\end{cases}
\]

Faction B’s legislative strategy when the project does not have a “large payoff” \( (\beta < \frac{\lambda p(2r - 1)}{1 - p}) \) is given by:

\[
S^B_{LM} = \begin{cases} 
\text{No proposal if } \beta < \min[\tau + \varepsilon, \frac{\varepsilon}{1 - \phi(1 - p(1 - r))}] \\
\text{Propose } \{(0,0), (\beta, \tau)\} \text{ if } \beta \geq \max[\tau + \varepsilon, \frac{\tau}{\phi(1 - p(1 - r))}] \\
\text{Propose } \{(0,\tau), (\beta, 0)\} \text{ if } \frac{\tau}{\phi(1 - p(1 - r))} > \beta \geq \frac{\varepsilon}{1 - \phi(1 - p(1 - r))} 
\end{cases}
\]
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Figure 1. Outline of the Legislative Bargaining/Judicial Review Game

**Stage 1**

Majority Party Makes a Proposal
Distributing Benefits and Costs of a Policy
Across the Majority and Minority

**Stage 2**

Nature Selects whether the Policy
will undergo Judicial Review, and
whether a Majority or Minority
District Court Judge will Hear the Case

**Stage 3**

No Judicial Review: Games Ends
District Court Judge Affirms or Vetoes the Policy

**Stage 4**

Nature Determines whether
Appellate Court will hear an
Appeal of the District Court’s Decision

**Stage 5**

Appellate Court Affirms Lower Court’s Decision. Game Ends
Appellate Court Overturns Lower Court’s Decision. Game Ends
Figure 2. The Impact of Judicial Review on Legislative Behavior and Policy Outcomes

Region I: Legislature Enacts Non-Factious Policies instead of Factious Policies

Region IIa: Legislature Enacts Factious, Inefficient Policies. Judges Veto a Proportion of these Policies

Region IIb: Legislature Enacts Factious, Inefficient Policies. Judges Veto a Proportion of these Policies

Region III: Legislature Enacts No Policies Instead of Factious Policies

Region IV: Legislature Never Enacts Policies, $\beta < \epsilon$

(Without judicial review, legislature enacts factious policies everywhere throughout $\beta$-$\tau$ space)