Reputation, Compliance, and Judicial Decision Making *

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November 3, 2014

VERY PRELIMINARY & INCOMPLETE

Abstract

Courts play an important role in adjudicating disputes. However, in most jurisdiction, courts are not empowered to enforce their own decisions, and face the very real prospect of having their decisions ignored. In this environment, courts rely on their prestige and reputation as impartial, disinterested experts, to either generate voluntary compliance by the parties, or to impel the Executive to generate compliance coercively. This paper builds a reputational model of judicial decision making to examine the effect of political considerations (such as compliance) on the nature of courts' decisions, and their incentive to strategically invest in their reputation and perceived legitimacy. The model delivers several interesting results, including that: (i) the strategic incentives introduce asymmetries in the efficiency of court rulings — the court is differentially likely to over-turn acceptable policies than to uphold unacceptable ones; (ii) courts are more likely to strategically rule 'incorrectly' in clear-cut cases, and to behave sincerely in ambiguous cases; (iii) the strategic considerations depend not only on the magnitude of court biases, but the direction as well; the incentives for a lef-leaning court may be very different to an equally right-leaning court facing a 'symmetric' case, and (iv) the strategic incentives depend crucially on the nature of the court's docket, and so reputational considerations can significantly the Supreme Court's *certiori* decisions. Additionally, the model provides a framework to consider the role of *stare decisis* as a reputation building mechanism, and thereby to explain courts' incentives to uphold precedents in some cases, and to abandon them in others.

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*I thank Josh Nadel for his incisive comments. All errors are mine.

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1 Introduction

Brown v Board of Education[1], the Supreme Court's landmark 1954 ruling, held tht segregation in public schools was unconstitutional. Three years later, on September 4 1957, Central High School in Little Rock, Arkansas was poised to admit African American students for the first time. Unhappy with the prospect of integration, many Arkansans protested by blockading the school to prevent the black students from entering. The protestors were supported by Governor Orval Faubus, who deployed the Arkansas National Guard to give support to the protestors and reinforce the blockade. Segregation may have been unconstitutional, *de jure*, but it was alive and thriving in Arkansas. On September 24 — 20 days later — President Eisenhower intervened, standing down the National Guard and deploying the 101st airborne division to provide an armed escort for the African American students to assert their right to attend school. But for Eisenhower's intervention, the Court's promise of equality would have been a mere gesture; noble, but ultimately ineffective.

The experience of 'The Little Rock Nine' demonstrates a significant constraint on judicial power. Whilst courts may decide cases, they are entirely unable to enforce their decisions. Courts, as Alexander Hamilton famously noted in Federalist #78, have "neither the sword nor the purse" — and so lack the power to compel compliance with their rulings. Rather, they rely on their reputation, as disinterested, non-partisan experts to either generate voluntary compliance by the parties, or to impel the Executive to compel compliance by using its power to coerce. This 'political constraint' on court behavior forms the basis of this inquiry. This paper seeks to understand how courts' audience (political leaders or the public more generally) respond to court decisions, and how courts decide cases in light of these compliance concerns.

There is a long and growing literature on the nature of judicial decision making. These papers can be broadly classified into two approaches. The attitudinal model approach posits that judges' choices are made with a view to maximize their individual policy-oriented preferences. (See, for example, Schubert (1965), Cooter (1983), Posner (1993), Segal and Spaeth (1994), Segal and Spaeth (2002), Schauer (1999), amongst many others.) Under this approach, judges behave like legislators, albeit subject to a different set of institutional rules, norms and constraints, and using a different set of policy tools. By contrast, the legal model "emphasizes that justices are motivated by a sense of duty or obligation to follow particular legal principles, rights or norms" Hansford and Spriggs (2006). (See, in addition, Wechsler (1959), Bickel (1986), amongst others.) The legalist approach insists that judges faithfully

[1] Brown v. Board of Education, 347 U.S. 483 (1954)

apply settled law, and engage in genuine discovery of the law's intent, and its consistent application within a broader body of settled law, when the law is ambiguous. It places significant weight on adhering to existing precedents, judicial restraint and textual interpretation. In this paper, I present a model of judicial decision making that straddles these two approaches.[2]

As the sole counter-majoritarian institution, the judiciary occupies an awkward position in the American system of government. Recognizing that dispute resolution can be a complicated matter, the Constitution's delegation of power to the judiciary seems entirely reasonable, especially when judges behave as disinterested, legal experts (i.e. if they emulate the legalist approach). However, if courts play an active policy-making role in the political process, as the attitudinal model contends, this arrangement becomes more difficult to justify. The notion of an unelected oligarchy of nine elites as a co-equal policy-making branch of government must surely challenge the democratic ideal. Hence, regardless of their true intentions, judges and courts have a strong incentive to present themselves as publicly-minded 'legalists', rather than policy-motivated 'attitudinalists'.[3]

At the heart of this analysis is a principal-agent problem. The principal (the relevant audience, be they the public or the other branches of government), having less expertise, delegates the authority to resolve disputes to the agent (the courts), who have potentially different policy preferences. Similar to other principal-agent problems, the asymmetric information (in this case arising out of differential expertise) allows the agent to behave contrary to the principal's mandate. In contrast to many principal-agent problems studied in the economics literature, the sorts of tools that the principal has at its disposal to incentivize the agent are limited in scope. This paper focuses on one important tool — the threat by the principal to render the agent powerless, by ignoring its decisions.

That such political realities exist has been evident since the founding generation. Political

[2]Empirical studies provide evidence for both approaches. For example, Segal and Cover (1989), using data from civil liberties cases from 1953 to 1988, find that the justices' votes are highly correlated with their 'values'. Segal and Spaeth (2002), Segal et al. (1995), amongst others, find corroborating evidence consistent with the attitudinal model. By contrast, Bailey and Maltzman (2008) find that legal factors play a significant role in explaining Supreme Court decisions. Black and Owens (2009) show that whilst judges are largely motivated by policy, these can give way to jurisprudential considerations.

[3]The statements of nominees during their confirmation hearings before the Senate make this incentive plain. In his opening statement to the Senate Judiciary Committee, Chief Justice Roberts stated: "Judges are like umpires. Umpires don't make the rules; they apply them. The role of an umpire and a judge is critical. They make sure everybody plays by the rules. But it is a limited role. Nobody ever went to a ball game to see the umpire... I will remember that it's my job to call balls and strikes and not to pitch or bat." Justice Sotomayor, similarly, pledged "fidelity to law", following the furor arising out of her 'wise-latina' comment.

leaders have ignored Supreme Court rulings at various times in U.S. history. Presidents Jefferson and Jackson both refused to follow directives of the Court, (Petrick, 1968), as did Lincoln, who in suspending the writ of habeas corpus, ignored Chief Justice Taney's ruling in *Ex parte Merryman* (1861)[4]. The public can also render unpopular court decisions moot by statutory or constitutional amendment. The Court's unpopular decision in *Employment Division v Smith* (1990)[5] resulted in Congress passing the Religious Freedom Restoration Act. Public disapproval of the Supreme Court of Hawaii's decision legalizing same-sex marriage in *Baehr v Miike* (1993)[6], resulted in constitutional amendments limiting marriage to opposite-sex couples, in that state and others, and to the federal Defense of Marriage Act. The California Supreme Court's ruling in *Re Marriage Cases* (2008)[7] similarly prompted the passage of Proposition 8, banning same-sex marriage in that state.

Moreover, it is clear that courts are aware of this political reality, and that their decisions are often responsive to perceived or actual threats by the other branches to ignore its decisions. Chief Justice Marshall's opinion in *Marbury v Madison* (1803)[8] makes clear that the Court wanted to rule in Marbury's favor, but instead ruled against him, acknowledging the reality that the Jefferson administration would simply ignore an adverse finding. Roosevelt's threat to pack the Supreme Court likely affected the Court's (and in particular Justice Owen Roberts's) decision to reverse its prior rulings which had effectively dismantled the New Deal. Some popular commentators (e.g. Campos (2012), Sheshol (2012)) suspect a different Justice Roberts of a similar 'switch in time to save nine' when the Court held the Affordable Care Act to be largely constitutional.

This paper studies the behavior of courts (and the public's response), in light of these political considerations. The court decides a sequence of cases through time. To capture the idea that courts have more expertise the public, I assume that the public only receives a noisy signal about the nature of each case. Hence, for any given case, the public cannot be entirely sure whether the court's decision is 'correct' or not. (These concepts will be made more precise in the next section.) However, the public can form beliefs about whether the court is behaving in a publicly-minded way (consistent with the legal model) or whether its decisions are policy-motivated (consistent with the attitudinal model). The public can choose to comply with the court's decision or not, based on its belief about whether the decision was correctly rendered. I refer to the public's belief that the court is well-behaved,

[4]Ex parte Merryman, 17 F. Cas. 144 (C.C.D. Md. 1861) (No. 9487)
[5]Employment Division, Department of Human Resources of Oregon vs. Smith, 494 U.S. 872 (1990)
[6]Baehr v. Miike. No. 20371, 1999 HAw. Lexis 391 (HAw. Dec. 9, 1999)
[7]re Marriage Cases, 43 Cal.4th 757 (2008)
[8]Marbury v. Madison, 5 U.S. 137 (1803)

as the court's *reputation*. The public updates its belief's about the court after each case, based on its signal and the nature of the court's decision. Since the public is more likely to believe the decision of a highly reputed court, policy motivated courts have an incentive to invest in their reputation by mimicking the behavior of publicly-minded ones. To this extent, this model straddles both the legal and attitudinal approaches to judicial decision making.

The model determines the conditions under which a biased court has an incentive to behave sincerely (by simply ruling on the basis of its policy preferences) and when it has an incentive strategically rule in a manner contrary to its policy goals. Furthermore, it analyzes how the public should rationally respond to the court's rulings, and the conditions under which it should choose to not comply. This analysis generates several interesting results. First, the incentives for the court display important asymmetries. For example, a court that is biased towards being more accommodating of government action than the public will always overturn a government policy when it is in agreement with the public that the policy is too intrusive on individual rights. By contrast, reputational considerations may cause the court to over-turn policies, even when it would be in agreement with the public that the policy was acceptable. This difference in the probabilities of type I (over-turning an acceptable policy) and type II (retaining an unacceptable one) errors has important implications for the efficiency of the common law. Moreover, the model shows that the incentives for left- versus right-biased courts are different, even when the magnitude of the bias is the same, which suggests important considerations for political leaders during the judicial nomination and approval process.

Second, the model exhibits interesting non-monotonicities. For example, it predicts that incentives to behave strategically (and to make the 'wrong' choice) are strongest when cases are 'clear-cut' (i.e. when the public believes the policy is clearly legitimate or clearly not), whilst the court enjoys the greatest freedom to act enact its policy aims, in more controversial cases, where the public are uncertain about the ideal outcome.

Third, the model shows that the public's compliance decision is generically unrelated to its own preferences, and depend most strongly on the nature and precision of its information, and the factors that affect the court's strategic choices. (The latter factors matter, because the court, in determining the 'correctness' of a decision, faces a signal-noise extraction problem, resulting from the court's strategic choices.) In particular, factors such as case salience, that have been the subject of empirical study, will typically not matter, except in so far the public is more or less informed about the legal issues at play in high salience cases.

Fourth, the model demonstrates that the court's reputation, the public's compliance choices and the extent of strategic behavior, all depend crucially upon the nature of the court's docket. Intuitively, the public will assess how frequently the court over-turns or upholds policy against its prior belief about the likelihood that government policies ought to be over-turned or not — which in turn depend on the public's belief about how strongly the government is seeking to push the boundaries of legality in its policy-making. Hence the public will respond differently to a left-biased court overturning a particuar case, than to a right-biased court (with bias of equal magnitude) upholding a symmetric case. Hence, the common law will be differentially efficient based, not only upon the magnitude of various courts' biases, but on the direction of bias as well. Moreover, since the nature of the court's docket affects the public's interpretation of court decisions, courts which have (partially) discretionary dockets, particularly the Supreme Court, face important strategic choices in their decisions to grant or deny *certiorari* petitions.

Unlike other models where reputation enters directly into the court's preference (for example Schauer (1999), who treats reputation as an intrinsic concern, although even in his model, reputational concerns are motivated by judges career concerns or interests in their judicial legacies), in this model, the role of reputation is entirely instrumental. Courts care about reputation, only in so far as it affects their future pay-off. A significant benefit to micro-founding reputation in this way is that it allows one to understand the nature of reputational concerns as a function of other primitive components of judges' preferences (such as the nature of the court's bias, the anticipated future sequence of cases, judges' relative time preference, and so on), the rather than as a primitive in its own right.

This paper contributes to an emerging literature on the nature of judicial decision making in law and economics and judicial politics. To be sure, legal scholars have long noted the importance of these factors (see, for example, Petrick (1968), Gibson (1989), Tyler and Mitchell (1994), Bassok (2013), amongst others). Nelson (2001), for example, argues that the Court often retains demonstrably erroneous precedents for fear that correcting them invites an appearance of deriving legal rules arbitrarily. However, none of these provides a fully cohesive framework, that combines the compliance choices of the public, with the incentives for courts of different types, based on the size and nature of the bias, the extent of asymmetric information, the credibility of threats of non-compliance an so on (although see Mondak (1992)). To my knowledge, this is the first paper that provides a cohesive, formal treatment of the role of legitimacy, reputation and threats of compliance on the court's (and public's) deliberations.

There are some empirically-based studies that investigate the effect of public sentiment. Gibson (1989) finds “some evidence that the legitimacy of the Court, at least as reflected in levels of diffuse support, affects compliance with unpopular decisions.” Tyler and Rasinski (1991) show that public views about the procedural fairness of Court procedures indirectly affects compliance choices. McGuire and Stimson (2004)) find that judges are highly responsive to the public mood. By contrast, Mishler and Sheehan (1996) find no evidence that public opinion affects majorities of justices. In a recent paper, Gibson and Caldeira (2011) find that the public are generally willing to support Supreme Court rulings, even though they perceive judges to be policy motivated. Collins and Cooper (2012) find a non-monotonicity in the effect of case salience and media coverage on Court decisions, with the Court being more responsive to non-salient and highly salient issues. The fact that the empirical evidence is varied, contradictory and occasionally surprising, speaks to the importance of generating a theory that makes sense of the incentives of the various agents involved in the process.

More generally, this paper contributes to the growing literature on strategically sophisticated courts, especially in the attitudinal framework. Epstein and Knight (1998) study the behavior of strategically sophisticated judges who take into account the expected behavior of other strategic actors. Several papers explore the relationship between the preferences of individual justices and the eventual opinion of the court. Importing the logic of the median voter theorem (see Black (1948) and Downs (1957)), many authors argue that Supreme Court decisions reflect the preference of the median justice (see Martin et al. (2004), Krehbiel (2007)). Lax and Cameron (2007) use a bargaining model to derive a similar result. Other papers extend the agenda-setting model of Romer and Rosenthal (1978), to argue that the preferences of the opinion writer and the Chief justice can significantly affect the nature of the final decision and/or opinion. (See Maltzman and Wahlbeck (1996), Bonneau et al. (2007), Carrubba et al. (2008).) Despite the ongoing debate, these papers all ultimately seek to micro-found the ‘preferences of the court’ in terms of the underlying preferences of the court’s officers. By contrast, this paper models the effect of extra-judicial actors upon court outcomes (and the implied court preferences that rationalize these choices), and to this extent, studies the scope for agenda-setting by agents who never have the actual ability to author court opinions. (This represents a departure from standard bargaining and agenda-setting models, in which an agent who is never the agenda-setter or proposer can never affect the agenda.)

This paper also contributes to an emerging literature that highlights the importance of informational considerations and constraints on judicial decision making. Several authors study the principal-agent problems that can arise in a hierarchical judiciary, when the superior court is resource constrained and has differing preferences to inferior courts. (See Kornhauser (1994), Songer et al. (1994), Cameron et al. (2000), Lax (2003).) Other models stress the informative content of court decisions, and the way other (judicial) actors respond to these signals. (See Clark and Kastellec (2010), Beim (2012) and Parameswaran (2013), amongst others.)

Additionally, this paper contributes to a sequence of papers that seek to understand the underlying mechanisms that explain legal rules and norms, in particular, the doctrine of *stare decisis.* For example, De Mesquita and Stephenson (2002) model the informational content of precedent. Since abandoning long-standing precedent can create significant uncertainty about the law, higher courts may prefer to distinguish cases rather than overturn precedent, to reduce the likelihood that lower courts will decide future cases in unintended ways. Baker and Mezzetti (2012) motivate adherence to prior precedent as a matter of optimal decision making by a resource constrained court. By contrast, Rasmusen (1994) motivates the norm of stare decisis as the consequence of repeated decision making by jurists on collegial courts; disrespecting the opinions of one's colleagues invites them to similarly disregard one's own opinions. As an extension, this paper investigates the instrumental role of stare decisis in a completely different context — as a reputational mechanism for jurists to communicate to their intended audience that their decisions reflect a desire to faithfully execute the law rather than to legislate from the bench.

At its core, this paper introduces the technology of reputational models into the legal context, and to this extent, builds upon a large literature from the microeconomic theory of repeated games. Mailath and Samuelson (2006) provide an excellent treatment of this literature. To the extent that this model deals with issues of information transmission an expertise, this paper uses insights from Crawford and Sobel (1982), Morris (2001) and Krishna and Morgan (1999), amongst many others.

The remainder of this paper is organized as follows: Section 2 presents the formal model. Section 3 analyzes the public's optimal compliance choice, whilst section 4 considers the optimal behavior of a rational court subject to reputational concerns. Section 5 presents several extensions.

2 The Model

There is a uni-dimensional convex, case-space $X = [\underline{x}, \bar{x}] \subset \Re \cup \{\infty, -\infty\}$, with $\underline{x} < 0 < \bar{x}$.[9] A case in this space represents the facts of a particular issue that the court is reviewing. With some caution, I interpret this space as measuring the level of intrusiveness of some government policy or statute, with larger values denoting more intrusive policies. I stress that this interpretation is purely to fix ideas — the setup clearly admits other interpretations. In this context, a legal rule partitions the case-space into equivalence classes according to whether the cases are legal (or acceptable or legitimate) or not. Given the monotonicity inherent in this setup, I focus on cut-point rules, wherein a policy x is held legal if it is at or below some threshold $\hat{x}$.

In each period t, a case $x_t \in X$ arrives before court, randomly drawn from a distribution $F : X \to \Re$. (At this stage, I assume cases arise exogenously. In an extension, I consider the case of the Supreme Court which can choose its docket.) In each case, the court must determine whether the government policy is legal (e.g. is it compatible with restrictions imposed by the Constitution?). Following the court's ruling, the 'audience' must determine whether to comply with the court's decision. For semantic ease, I typically refer to the audience as 'the public', although again it should be clear that the setup admits other interpretations (including officers of the non-judicial branches of government). I normalize the public's ideal legal rule to $\hat{x}_p = 0$. Hence the public would ideally find cases with negative values to be acceptable, and cases with positive values to be unacceptably burdensome.

There are two types of courts $\theta \in \{p, r\}$ — a publicly-minded court and a 'rational' court.[10] The publicly-minded court is a behavioural-type that always rules in the way that the public believes is ideal. Such a court sees itself simply as a fact-finder which mechanically implements the will of the public and the other branches of government. By contrast, the rational court is policy motivated, and has an ideal legal rule $\hat{x}_r = \chi$. The court's reputation at the beginning of period t is the public's belief $\pi_t \in [0, 1]$ that the court is publicly-minded.

To give the principal-agent considerations bite, I assume $\chi \neq 0$. If $\chi > 0$, then the rational court is more accommodating of government action than the public would have it be, and vice versa. I refer to this as the rational court's 'bias'. I allow the court's bias to change

[9] See Kornhauser (1992b)

[10] The usage of the term 'rational' follows the reputation literature, and is not intended to cast any aspersions on the relative merits of the legalist and attitudinal schools of thought.

period by period. [11] Where necessary, I will assume χ_t is drawn from a (time-invariant) distribution $R : X \to \Re$. (I do not preclude the possibility that $\chi_t = 0$ in some periods, but this cannot occur in every period.)

To capture the idea that the court has more expertise than the public, I assume that the court perfectly observes the facts of the cases (i.e. it learns x_t) whereas the public observes an unbiased but imperfect signal $y_t \in X$, where y_t is drawn from a distribution $G(\cdot|x) : X^2 \to \Re$ which admits a density $g(\cdot|x)$ and has conditional mean $E[y_t|x_t] = x_t$. Where needed, I assume that G satisfies the increasing hazard rate property: (i.e. for $y' > y$, $\frac{g(y)}{1-G(y)} < \frac{g(y')}{1-G(y')}$, whenever G admits a density g). This assumption is standard in signaling models and is a consequence of the (commonly assumed) monotone likelihood ratio property. Given the imprecision in the public signal, the public typically cannot know for certain if the court's decision is appropriate given the public's ideal rule. Instead, the public forms beliefs ρ_{At} about the likelihood that the case (with outcome $A \in \{0, 1\}$) was correctly decided. These beliefs, obviously, will depend upon the public signal, the court's reputation, and the bias of the rational court, amongst other factors.

To consider interesting comparative statics, I allow the salience of the case β_θ to vary for both the rational court and the public. At time t, the vector of saliences (β_{pt}, β_{rt}) is drawn from a distribution $B : \Re^2_+ \to [0, 1]$. I normalize these saliences so that $E[\beta_p] = E[\beta_r] = 1$. Finally, players have commonly known discount rates δ_p and δ_r, respectively.

In each case, the court must decide the outcome of the case, which is a binary decision $A \in \{0, 1\}$, where $A = 1$ implies the court finds a policy to be unacceptable. (As a matter of language, I will say the court either 'accepts' or 'overturns' a case or policy.) A strategy $a_t \in [0, 1]$ specifies the probability that each type of court should find each case unacceptable, given all variables and parameters observable by the court. Following each case, the public must make its compliance choice, which is a binary decision $C \in \{0, 1\}$, where $C = 1$ implies that the public complies. A strategy $c_{At} \in [0, 1]$ specifies the probability of compliance at time t following a decision $A \in \{0, 1\}$ by the court. I focus on Markovian strategies, whereby the actors may only condition their actions on pay-off relevant variables.[12]

[11] This admits several interpretations. On the one hand, it may reflect the changing nature of the court's bias on a given issue, for example due to changes in the court's membership or evolving philosophies of justices. On the other hand, it may reflect the idea that court is resolving cases in distinct (uni-dimensional) policy areas in different periods. This latter interpretation allows the court to have a strong bias in some policy areas, and not others, and to be relatively accommodating of government in some policy areas, and less so in others.

[12] In particular, this precludes the actors from adoption time-varying strategies, or conditioning their strategies on the history of play, except through the court's reputation. Given time-invariance, much of the analysis that follows implicitly omits time subscripts.

The strategy of the publicly-minded court is straight-forward: $a_p = 1$ if $x > 0$ and $x \leq 0$, independent of the realization of the public signal y, and any other variables. From herein, I focus on the strategy of the public and the rational court. In a given period t, the rational court receives payoff β_{rt} if the public complies with the court's ruling *and* the court's decision is consistent with its ideal rule, and 0 otherwise. Ie. the court receives the bad payoff if either it ruling is inconsistent with its ideal, or if the public fails to comply with its ruling.[13] The court decides cases in a way that maximizes its discounted stream of expected stage payoffs, given the public's equilibrium compliance strategy and reputational effects that arise in equilibrium. Similarly, in each period, the public care about the likelihood of choosing the correct outcome, and makes compliance choices in way that maximizes its discounted stream of stage payoffs (weighted by the salience of different issues). More precisely, the public receives payoff β_{pt} if it complies with a correctly decided case, or ignores an incorrectly decided one. The public makes its compliance choice to maximize the discounted stream of stage payoffs, given the court's equilibrium strategy.

From herein, the 'correctness' of a decision will be understood to a subjective evaluation by an agent, judged against their own ideal legal rule. Hence the statement 'the public believe the court's decision to uphold a policy is correct' shall be understood to mean that the public believes the true case x satisfies $x < 0$ if it is judged to be acceptable, or that the true case satisfies $x > 0$ if it is judged to be unacceptable.

3 Preliminaries

Define $H(\cdot|y) : X^2 \rightarrow \Re$ the conditional distribution of x given an observed signal $y \in X$. If F and G both admit densities, then so does H, and by Bayes' rule:

$$h(x|y) = \frac{g(y|x) f(x)}{\int_{\underline{x}}^{\overline{x}} g(y|z) f(z) dz}$$

[13] This assumption is obviously stylized. Under my approach, non-compliance is costly to the court only to the extent that its ideal outcome fails to be implemented. One can imagine a slightly different set-up in which non-compliance is intrinsically costly — i.e. where the court feels the pain of the public's slap-in-the-face. Whilst this paper does not seek to dismiss this concern, the way it affects decision making by the court seems relatively straight-forward. Since it operates separately to reputational considerations, this paper abstracts from this consideration. My approach also makes the assumption that the court does not receive positive utility if the public fails to comply with a ruling that is contrary to the court's ideal. Without embarrassment, this paper ignores the possibility that the court decide a case in a sufficiently outrageous manner to encourage non-compliance. Whilst this may survive scrutiny under a purely consequentialist account (the reputational costs work against this, even if the incentive exists), it is a clearly perverse sequence of events. I am unaware of any court of repute that has openly sought rebuke in this way for strategic reasons.

$H(\cdot|y)$ is a distribution that characterizes the public's *interim* belief about the true case facts, given the public signal y. This belief is *interm* in the sense of being formed immediately upon observing the public signal y, and prior to observing the court's behavior.

Let $V(\pi)$ be value function of a rational court and let $W(\pi)$ be the value function of the public.[14]Let $\omega = (\pi, y, \chi, \beta, \delta)$ be the vector of parameters other than the true case-facts x. By assumption, these parameters are public information in each period. Let $\Omega = [0,1] \times X^2 \times (0,\infty)^2 \times (0,1)^2$ be the parameter space, and let $\mathcal{W}(\omega)$ be the distribution function over Ω. Note that the value functions are defined *ex ante* — they encode the expected lifetime utility before any case-specific parameters (such as the court's bias χ, case salience β, and the public signal y) have been determined. For this reason, the value functions only depend upon the state-variable π (since this is determined from the prior history of play).

Proposition 1. *There exists a unique Markovian Equilibrium characterized by a pair of continuous value functions $V(\pi)$ and $W(\pi)$, a triple of (upper-hemi-continuous) policy functions $a^*(x,\omega)$, $c_1^*(\omega)$ and $c_0^*(\omega)$, a pair of (continuous) belief functions $\rho_1^*(\omega)$ and $\rho_0^*(\omega)$, and a pair of reputational update functions $\Pi_1^*(\omega)$ and $\Pi_0^*(\omega)$, s.t.*

1. *The value functions satisfy:*

$$\begin{aligned} V(\pi) &= \int_{\omega\in\Omega} \Big\{ a^*(x,\omega)\left(c_1^*(\omega)\beta_r \mathbf{1}[x>\chi] + \delta_r V(\Pi_1(\omega))\right) \\ &\quad + (1-a^*(x,\omega))\left(c_0^*(\omega)\beta_r \mathbf{1}[x>\chi] + \delta_r V(\Pi_0(\omega))\right)\Big\} d\mathcal{W}(\omega) \end{aligned}$$

and

$$\begin{aligned} W(\pi) &= \int_{\omega\in\Omega}\int_{x\in X} \Big\{ a^*(x,\omega)\left[c_1^*\rho_1(\omega) + (1-c_1^*)(1-\rho_1(\omega)) + \delta_p W(\Pi_1(\omega))\right] \\ &\quad + (1-a^*(x,\omega))\left[c_0^*\rho_0(\omega) + (1-c_0^*)(1-\rho_0(\omega)) + \delta_p W(\Pi_0(\omega))\right]\Big\} dH(x|y)\, d\mathcal{W}(\omega) \end{aligned}$$

[14]In the formulae that follow, arguments are often suppressed for notational convenience. At this stage I assume these value functions exist. (Clearly, they exist for finite horizon games). For infinite horizon games, the fact that they depend upon the reputational mechanism (which is itself pinned down in equilibrium) makes showing existence non-trivial. (I expect a two-stage fixed point argument à la Battaglini and Coate (2008) will do the trick.)

2. The policy functions satisfy:

$$
\begin{aligned}
a^*(\omega) &= \max_{a\in[0,1]} a\left[c_1^*(\omega)\beta_r\mathbf{1}[x>\chi]+\delta_r V(\Pi_1(\omega))\right]+(1-a)\left[c_0^*(\omega)\beta_r\mathbf{1}[x>\chi]+\delta_r V(\Pi_0(\omega))\right] \\
c_1^*(\omega) &= \max_{c_1\in[0,1]} c_1\rho_1(\omega)+(1-c_1)(1-\rho_1(\omega))+\delta_p W(\Pi_1(\omega)) \\
c_0^*(\omega) &= \max_{c_1\in[0,1]} c_0\rho_0(\omega)+(1-c_0)(1-\rho_0(\omega))+\delta_p W(\Pi_0(\omega))
\end{aligned}
$$

3. The belief functions satisfy:

$$
\begin{aligned}
\rho_1^*(\omega) &= \frac{\pi(1-H(0|y))+(1-\pi)\int_0^{\bar{x}} a^*(x,\omega)\,dH(x|y)}{\pi(1-H(0|y))+(1-\pi)\int_{\underline{x}}^{\bar{x}} a^*(x,\omega)\,dH(x|y)} \\
\rho_0^*(\omega) &= \frac{\pi H(0|y)+(1-\pi)\int_{\underline{x}}^{0}[1-a^*(x,\omega)]\,dH(x|y)}{\pi H(0|y)+(1-\pi)\int_{\underline{x}}^{\bar{x}}[1-a^*(x,\omega)]\,dH(x|y)}
\end{aligned}
$$

4. The reputational update functions satisfy:

$$
\begin{aligned}
\Pi_1^*(\omega) &= \frac{\pi(1-H(0|y))}{\pi(1-H(0|y))+(1-\pi)\int_{\underline{x}}^{\bar{x}} a^*(x,\omega)\,dH(x|y)} \\
\Pi_0^*(\omega) &= \frac{\pi H(0|y)}{\pi H(0|y)+(1-\pi)\int_{\underline{x}}^{\bar{x}}[1-a^*(x,\omega)]\,dH(x|y)}
\end{aligned}
$$

As noted in the previous section, the Markovian assumption implies that the optimal strategies (and hence value functions and belief functions) depend only upon pay-off relevant variables. Accordingly, these functions are time- and history-invariant. Given that this is a game of incomplete information, the equilibrium must specify both the agents' strategies and their beleifs — about both the 'correctness' of each decision and of the (updated) reputations.[15] As the proposition makes clear, the agents choose their optimal strategies *taking the equilibrium beleifs as given.* These beliefs are updated uing Bayes' Rule and are equilibrium beliefs, if they are consistent (in the sense of rational expectations) with the agent's equilibrium strategies.

Lemma 1. *$V(\pi)$ and $W(\pi)$ are increasing in π.*

[15] The expressions for these belief functions follow from a direct application of Bayes' Rule. For example, $\rho_1^*(\omega)$ is the probability that the public assigns to a case which was overturned, being correctly decided - i.e. the probility that $\chi > 0$ given that the case was overturned, and given the signal y. The numerator is the joint probability that $\chi > 0$ and $a = 1$ (which will occur with probability 1 if the court is publicly-minded, and occurs with probability $a^*(x,\omega)$ if the court is rational). The denominator is the probability that a case will be overturned, correctly or not.

4 Equilibrium Strategies

4.1 Strategy of the Public

The first question is to consider the optimal compliance strategy of the public. The public's optimal compliance strategy, following an action $A \in \{0,1\}$ by the Court, solves:

$$c_A^*(\omega) = \arg\max_{c\in[0,1]} \{(1-\delta_p)\,\beta_p\,(c\rho_A^*(\omega) + (1-c)(1-\rho_A^*(\omega))) + \delta_p W(\Pi_A^*(\omega))\}$$

given the equilibrium belief and reputation functions.

Lemma 2. *The public's optimal compliance strategy is to choose:*

$$c_A^*(\omega) = \begin{cases} 1 & \rho_A^*(\omega) > \frac{1}{2} \\ \hat{c}(\omega) & \rho_A^*(\omega) = \frac{1}{2} \\ 0 & \rho_A^*(\omega) < \frac{1}{2} \end{cases}$$

where $\hat{c}(\omega) \in [0,1]$.

Lemma 2 shows the public's optimal strategy in any given period is to comply with any decision that it believes is more likely to be correctly decided rather than not. The intuition is as follows —- the public's utility depends on its contemporaneous utility (which depends on whether it acts 'correctly' - in the sense of obeying a 'correctly' decided case, and ignoring an incorrectly decided one) - and its future utility, which depends on the Court's reputation (since this affects how strongly the public trusts any given Court decision). However, the public's compliance choice only affects contemporaneous utility — future utility depends on the reputational updating rule, which is taken as given when the public chooses its compliance strategy. Hence, the public makes its compliance with the aim to maximize the likelihood of acting 'correctly'. Straight-forwardly, the public should obey the Court whenever they form a belief that the Court's decision is more likely correct than not (i.e. if $\rho > \frac{1}{2}$), and should ignore the Court if the opposite is true. If the public believes these events are equally likely, then it is indifferent between complying and not — but may choose a mixed strategy where it complies probabilistically to appropraitely incentivize the Court. [16]

[16] As is clear in this result, the Markovian assumption has significant bite. If history dependent strategies were allowed, the public may choose a different strategy, which is enforced by the threat that any deviation will be punished by reversion to a different strategy (by the Court) which results in significantly lower

Note well that the Court's strategy depends solely upon its belief about the decision's 'correctness', ρ_A. Other factors such as the salience of the case to the public, and the court's reputation are unimportant, except in so far as these indirectly affect ρ_A. This is a strong result! And it is seemingly robust to various modeling choices. (For example, this model simplifies the analysis by assuming the case salience to be independent of all other factors. Of course, the public may pay more attention to more salient cases. In the context of this model, this would amount to the signal process $G(\cdot|x)$ being a function of salience to the public — presumably in the sense that the process becomes less noisy as the salience improves. Whilst this will certainly affect the precision of its belief ρ, the logic of following one's best guess remains unchanged.)

4.2 Strategy of the Rational Court

Now consider decision making by the court. The court's optimal choice must satisfy:

$$a^*(x,\omega) = \arg\max_{a\in[0,1]} \left\{a\beta_r\left[c_1^*\mathbf{1}[x>\chi] + \delta_r V\left(\Pi_1^*(\pi;a^*)\right)\right] + (1-a)\beta_r\left[c_0^*\mathbf{1}[x<\chi] + \delta_r V\left(\Pi_0^*(\pi;a^*)\right)\right]\right\}$$

In characterizing the Court's optimal strategy, I proceed by first presenting a sequence of intermediate results.

Remark 1. In any equilibrium, $a^*(x,\omega) = a^*(x',\omega)$ for all $x, x' < \chi$, and $a^*(x,\omega) = a^*(x',\omega)$ for all $x, x' > \chi$.

Remark 1 is intuitive. It states that, whilst in principle the court may condition its strategy on the case facts in some fine way, there is never an advantage to doing so in equilibrium. Why? Since the true case facts, x, are unobserved by the public, they cannot condition their compliance strategy on its realization. Hence, x affects the court's policy only in-so-far as it directly affects the court's utility. But clearly the facts of the current case do not affect the continuation utility, and it affects the stage utility only in the coarse sense of whether the court would prefer to overturn the policy or not. Given the Markovian assumption,

continuation values. To this extent, there *may* exist other subgame perfect strategies. (As a caveat to this, I note that the Markovian strategy is stage-game Nash, and so provides a lower-bound on W — since the public can always guarantee themselves at least this payoff. Moreover, one expects that to improve its payoff, the public must impose a more exacting standard for compliance than the mere preponderance rule. But any such strategy would be likely worse for the Court, and it is difficult to envisage the Court enforcing such an equilibrium by punishing favourable (from the Court's perspective) deviations.)

the court must treat all cases that it would ideally hold acceptable, and all cases that it would ideally hold unacceptable, alike. To this extent, let $a_L^*(\omega)$ denote the court's optimal strategy whenever an acceptable case arises, and $a_H^*(\omega)$ denote the court's optimal strategy whenever an unacceptable case arises. Formally, $a^*(x,\omega) = a_L^*(\omega)$ for any (every) $x < \chi$ and $a^*(x,\omega) = a_H^*(\omega)$ for any (every) $x > \chi$. placed on the court's bias in future periods.

4.2.1 Decision Making by an Accommodating Court

For concreteness, in the following subsection, I assume that $\chi > 0$ in the current case (unless otherwise specified), so that the Court is more accommodating of government action that the public ideally would be. In a later section, I consider the opposite case; as will become clear, all of the insights carry through, so the assumption is (essentially) without loss of generality. For clarity, this assumption only relates to the current case before the court — no restrictions are

Lemma 3. *(Suppose $\chi > 0$.) In the unique equilibrium, the rational court plays a strategy $a^*(\omega)$, where $a^*(x,\omega)= 1$ if $x > \chi$ and $a^*(x,\omega) = a_L^*(\omega) \leq 1 - \frac{H(0|y)}{H(\chi|y)} = \bar{a}_L(\omega) < 1$ if $x \leq \chi$.*

Corollary 1. *(Suppose $\chi > 0$.) In equilibrium, choosing $A = 1$ (weakly) increases reputation, whilst choosing $A = 0$ (weakly) reduces it. Moreover, the net reputational gain from choosing $A = 1$ is strictly positive whenever $a_L^*(\omega) < \bar{a}_L(\omega)$. The opposite is true if $\chi < 0$.*

Lemma 3 states that a rational court always behaves sincerely by over-turning policies that offends it, but that it may behave strategically by overturning cases that it believes are in fact acceptable. Before describing the intuition for this lemma, I first discuss Corollary 1, which states that, in equilibrium, the court gains reputation by over-turning government policy, and loses reputation by accommodating policy. Moreover, this is true, regardless of the public signal y. The intuition is straight forward. Given its preferences, the rational court would ideally overturn government policy (choose $A = 1$) less frequently than the publicly-minded court. Hence, after observing a choice of $A = 1$, the public should be more inclined to believe that the court is in fact of the publicly-minded sort. In equilibrium, this remains true even when the rational court opportunistically over-turns cases (that it would ideally find acceptable) in order to increase its reputation. That is, even though the public understands that a rational court may be choosing $A = 1$ more frequently than it ideally would, because of the associated reputational gains, in equilibrium, the public still believes that the rational court is statistically less likely to over-turn government policies than a publicly-minded court would be. This belief is rationalized by the equilibrium upper bound (in Lemma 3) on court's willingness to strategically over-turn cases to strategically build reputation.

With the intuition of Corollary 1 in mind, I return to Lemma 3. The rational court always over-turns a policy that it believes to be unacceptable. Indeed, since it is more accommodating of government action than the public, any policy that a rational court would find offensive, will be overturned, regardless of the court's type. Moreover, this is true *independent* of the public signal, and even in cases where the public strongly believes the government's policy to be legitimate. (To see why, if the public's *ex ante* belief is that the policy is legitimate, it must judge the likelihood of the case offending the rational court to be significantly lower than the probability that it would offend a publicly-minded court.) The reason for this is straight forward. By corollary 1, over-turning policy builds reputation. If $x > \chi$, then over-turning the case also benefits the court intrinsically, since it will be ruling correctly. Hence, the court faces no trade-off between its policy and reputational goals, and simply makes the stage-game dominant choice. By contrast, if $x < \chi$, the court faces a trade-off between its policy (which cause it to want to uphold the government policy) and reputational goals (which cause it to want to over-turn it). The government may now choose to over-turn 'legitimate' policies purely to build reputation. Moreover, its choice to do so will generically depend upon the public signal y.

This implies a significant asymmetry in the rational court's behavior. It always behaves sincerely when confronted with a case that is offensive, given its ideal legal rule, but potentially behaves strategically when confronted with a case that is inoffensive. It is important to note that this strategic behavior does not only arise in cases where the rational and publicly-minded courts disagree (i.e. if $x \in (0, \chi)$). When $x > \chi$, both types of courts agree that the policy is unacceptable, and both types of courts hold it to be so, with probability 1. By contrast, when $x < 0$, both types of courts agree that the case ought to be found acceptable, but nevertheless, the rational court may choose to over-turn some such cases, to build its reputation as the publicly-minded type. (Even though it is doing the opposite of what the publicly-minded court would actually choose!) This counter-intuitive result follows from the assumption of a non-expert public who cannot perfectly monitor the court. The rational court does not build reputation by imitating the publicly-minded court, but by making choices that the public perceive would be consistent with a publicly-minded court, even if in reality they are not.

Let $\rho_A(\omega; a_L)$ denote the public's belief about the correctness of a decision $A \in \{0, 1\}$ under the assumption that the court chooses strategy $a_L \in [0, \bar{a}_L]$ (not necessarily the equilibrium one) when $x < \chi$. In particular, let $\rho_A(\omega; 0)$ be the public's belief under the assumption that the court behaves sincerely. Similarly, let $\Pi_A(\omega; a_L)$and $\Pi_A(\omega, 0)$ be the analogous reputational updates. The following can be easily derived, making use of the fact that $a^*(x, \omega) = 1$ whenever $x > \chi$ and $a^*(x, \omega) = a_L(\omega)$ for all $x < \chi$:

$$\begin{aligned}
\rho_0(\omega; a_L) &= \frac{[\pi + (1-\pi)(1-a_L)] H(0|y)}{\pi H(0|y) + (1-\pi)(1-a_L) H(\chi|y)} \\
\rho_1(\omega; a_L) &= \frac{\pi(1 - H(0|y)) + (1-\pi)[1 - H(\chi|y) + a_L(H(\chi|y) - H(0|y))]}{\pi(1 - H(0|y)) + (1-\pi)[1 - H(\chi|y) + a_L H(\chi|y)]} \\
\Pi_0(\omega; a_L) &= \frac{\pi H(0|y)}{\pi H(0|y) + (1-\pi)[(1-a_L) H(\chi|y)]} \\
\Pi_1(\omega; a_L) &= \frac{\pi(1 - H(0|y))}{\pi(1 - H(0|y)) + (1-\pi)[(1 - H(\chi|y)) + a_L H(\chi|y)]}
\end{aligned}$$

Lemma 4. *The reputational update $\Pi_1(\omega, a_L)$ ($\Pi_0(\omega, a_L)$) is decreasing (increasing) in a_L and satisfy: $\Pi_0(\omega, a_L) \leq \pi \leq \Pi_1(\omega, a_L)$ and these inequalities are strict whenever $a_L < \bar{a}_L$. Similarly, $\rho_0(\omega, a_L)$ ($\rho_1(\omega, a_L)$) is increasing (decreasing) in a_L.*

The intuition is relatively straight-forward. As a_L increases, so does the likelihood that the rational court will overturn a case. By contrast, the publicly-minded court's strategy does not change. Hence, after seeing a case over-turned, a Bayesian principal will increase the probability that the court is the rational type, relative to being publicly-minded. The opposite is true after seeing a case upheld. Similarly, as a_L increases, since an over-turned case now provides more evidence for a rational court, a Bayesian principal will trust the correctness of the decision less (and vice versa).

Given the above lemmata, the following proposition characterizes the nature of the rational court's strategic decision.

Proposition 2. *Suppose $x < \chi$. A rational court behaves sincerely (i.e. chooses $a_L^*(\omega) = 0$) for a given $\omega \in \Omega$, provided that:*

$$\beta_r \mathbf{1}\left[\rho_0(\omega; 0) > \frac{1}{2}\right] > \delta_r [V(\Pi_1(\omega; 0)) - V(\Pi_0(\omega; 0))] \tag{1}$$

If not, the court plays a mixed strategy, and strikes down the policy with probability $a_L^*(\omega)$ implicitly defined by:

$$\beta_r \left(\mathbf{1}\left[\rho_0(\omega; a_L^*) > \frac{1}{2}\right] + c_0^*(\omega)\mathbf{1}\left[\rho_0(\omega; a_L^*) = \frac{1}{2}\right]\right) = \delta_r [V(\Pi_1(\omega; a_L^*(\omega))) - V(\Pi_0(\omega; a_L^*(\omega)))] \tag{2}$$

Proposition 2 is again intuitive. The left-hand side expression in the first equation is the rational court's stage (policy-based) utility if it sincerely chooses to uphold the policy. The right-hand side expression is the discounted future reputational gain to the court from over-turning the case rather than not. Hence, the left-hand side expression represents the benefits of behaving sincerely, whilst the right-hand side represents the costs. Clearly, if the benefits outweigh the costs, a sincere strategy is optimal. If not, then the court must play a mixed strategy. (Of course, it is never optimal for the court to choose a pure strategy of always over-turning the policy. If it did, then it would over-turn case more frequently than the publicly-minded court, and doing so would reduce its reputation. This would cause it to sacrifice utility on both the policy (stage) and reputational (future) dimensions.) In order to choose a mixed strategy, it must be indifferent between either pure action, which can only be true if the benefits and costs coincide. As the proof of proposition 2 demonstrates, there exists a mixing rule that causes the public to update its beliefs about the court's reputation, and correctness of its decision, in a way that precisely equates costs and benefits.

The intuition for a mixed strategy is similar to that in the game of matching pennies. If the public expects the court to decide sincerely, then the reputational benefits of choosing $A = 1$ outweigh the policy benefits of choosing sincerely. By contrast, if the public expects the court to always over-turn the policy, then reputational benefits go the other way — the court gains both reputational and in policy terms by adjudicating sincerely. Hence there is no pure strategy equilibrium. When the court is assumed to behave sincerely, the incentive for it to defect and choose $A = 1$ are too strong. As the probability that it strategically chooses $A = 1$ increases, so does the public's belief in the correctness of an $A = 0$ decision (since now it is more likely that such a decision was rendered by the publicly-minded court). At the same time, the reputational gain from choosing $A = 1$ is smaller, since the rational type is assumed to be more likely to over-turn cases. The net effect is to reduce the incentive for the court to defect and choose $A = 1$. The equilibrium mixing probability is the one at which this incentive disappears altogether.

As noted in Lemma 3, there is an upper-bound on the mixing probability, given by $\bar{a}_L(\omega) = 1 - \frac{H(0|y)}{H(\chi|y)}$. As I show in the proof of Proposition 2, if $a = \bar{a}_L(\omega)$, then reputational incentives disappear. In this case, given the public signal y, the public assigns equal probability to both the rational and publicly-minded types choosing to over-turn a case. Hence, rational court cannot distinguish itself by choosing $A = 1$, and the public simply retains its prior about the court's type. Of particular note, if $\rho_0(\omega; \bar{a}_L(\omega)) < \frac{1}{2}$ — so that there is no policy under which the public will trust the court's judgment, then court will tend solely to its reputation by choosing $A = 1$ as frequently as is possible. By Lemma 3, it overturns cases at the maximal rate $\bar{a}_L(\omega)$.

4.3 Comparative Statics

Proposition 2 gives conditions under-which the rational court behaves strategically, and Equation (2) implicitly defines the associated mixing probabilities. In this section, I analyze the effect of the various model parameters (reputation, case salience, public signal etc.) on the strategic behavior of the court.

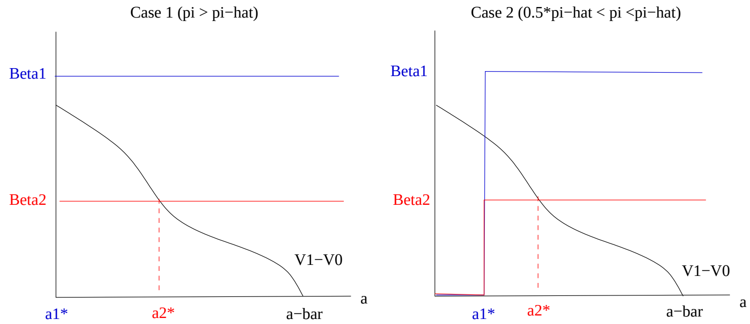
Let $\hat{\pi}(\omega) = \frac{1}{2}\frac{H(\chi|y)-2H(0|y)}{H(\chi|y)-H(0|y)}$ and let $\tilde{a}_L(\omega) = \frac{H(\chi|y)-\frac{2-\pi}{1-\pi}H(0|y)}{H(\chi|y)-2H(0|y)}$. Let $\hat{a}_L(\omega) = 0$ if $\beta_r > \delta_r [V(\Pi_1(\omega,0)) - V(\Pi_0(\omega,0))]$, and $\hat{a}_L(\omega)$ be the solution to $\beta_r \mathbf{1}[\rho_0(\omega; a_L)] = \delta_r [V(\Pi_1(\omega,a_L)) - V(\Pi_0(\omega,a_L))]$ otherwise. Finally, let $\tilde{\pi}(\omega) = 2\hat{\pi}(\omega)$ if $\beta_r \geq \delta_r [V(\Pi_1(\omega,0)) - V(\Pi_0(\omega,0))]$, and let $\tilde{\pi}(\omega) < 2\hat{\pi}(\omega)$ be the solution to $\tilde{a}_L(\omega) = \hat{a}_L(\omega)$ otherwise. (I verify that these are well defined in the proof of Proposition 3).

Proposition 3. *Let $x < \chi$. The optimal policies for the court and public satisfy:*

- *If $\pi > \tilde{\pi}(\omega)$, $c_0^*(\omega) = 1$ and $a_L^*(\omega) = \hat{a}_L(\omega)$;*
- *If $\hat{\pi}(\omega) \leq \pi \leq \tilde{\pi}(\omega)$, then: $c_0^*(\omega) = \frac{1}{\delta_r \beta_r}[V(\Pi_1(\omega,\tilde{a}_L(\omega))) - V(\Pi_0(\omega,\tilde{a}_L(\omega)))] < 1$ and $a_L^* = \tilde{a}_L(\omega)$; and*
- *If $\pi < \frac{1}{2}\hat{\pi}(\omega)$, then $c_0^*(\omega) = 0$ and $a_L^*(\omega) = \bar{a}_L(\omega)$.*

To understand this result, first note that if the court's reputation is large enough (formally if $\pi > 2\hat{\pi}(\omega) = \frac{H(\chi|y)-2H(0|y)}{H(\chi|y)-H(0|y)}$), then the public will always assign greater probability to the court's decision to uphold a case being correct rather than not, regardless of the court's anticipated strategy. Hence, if the outcome of the case is a decision to uphold ($A = 0$), the court will definitely receive stage-payoff β_r. However, doing so incurs a reputational cost of $V(\Pi_1(\omega,a_L)) - V(\Pi_0(\omega,a_L))$. If this cost is large enough, the court will not want to always choose $A = 0$, notwithstanding that this is its preferred stage-game outcome and compliance is guaranteed; reputational considerations (which affect the probability of compliance in the future) may entice the court to behave strategically (and thus forgo current stage payoffs), even when current compliance is guaranteed. This case is illustrated in the first panel of Figure 1, below.

Figure 1: Equilibrium policies and case salience



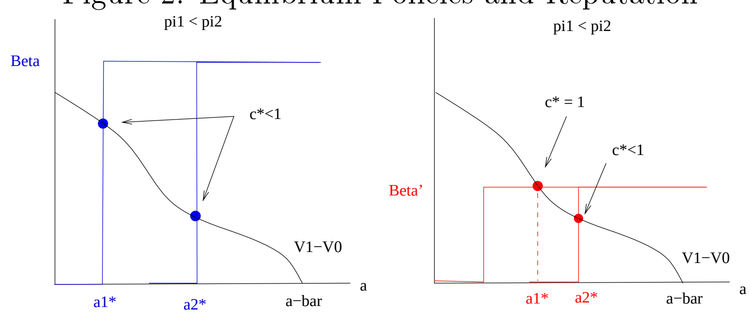
If the court's reputation is small enough (formally if $\pi < \hat{\pi} = \frac{1}{2}\frac{H(\chi|y)-2H(0|y)}{H(\chi|y)-H(0|y)}$), then the public will always distrust a court decision to uphold a case; and so the court can never induce compliance, regardless of its strategy. Hence, the court can never achieve positive stage payoffs, and so will wholly focus on its reputation. As Proposition 2 makes clear, the court will optimally choose $a_L^* = \bar{a}_L(\omega)$, which implies reputational gains disappear in equilibrium.

Finally, suppose the court has a middling reputation $\left(\frac{1}{2}\hat{\pi}(\omega) < \pi < \hat{\pi}(\omega)\right)$. Now, if the public anticipates that the probability that the court chooses $A = 0$ is relatively large, then it will be more suspicious than not of a court that upholds a case. By contrast if the court routinely overturns cases, then the public will be more inclined than not to believe the court when it upholds a case. Now, the court must be strategic in order to generate contemporaneous compliance. Let $\tilde{a}_L(\omega)$ be the minimum level of mixing for which the court is believed when it upholds a case. For $\pi \in \left(\frac{1}{2}\hat{\pi}, \hat{\pi}\right)$, $\tilde{a}_L \in (0, \bar{a}_L)$. Clearly the equilibrim policy must satisfy $a_L^* \geq \tilde{a}_L$. Furthermore, let $\hat{a}_L(\omega)$ be the ideal level of mixing if compliance is guaranteed (as in the previous case). As the second panel in Figure 1 illustrates, the size of the case salience β can have important implications for the nature of the equilibrium. Let $\beta_1 > \beta_2$. If the case is not very salient ($\beta = \beta_2$), then reputational considerations would entice the court to be strategic with relatively high probability (it will ideally choose $a_L^* = \hat{a}_L$) even when compliance is guaranteed, and so the constraint $a_L^* \geq \tilde{a}_L$ is non-binding. In equilibrium, the public trusts the court's judgment when it upholds cases, and so compliance is guaranteed.

By contrast, suppose the case is relatively salient ($\beta = \beta_1$). Now, if compliance were guaranteed, the court would ideally mix with probability so low (potentially not at all) that the public will distrust its decisions when it upholds a case (i.e. $\hat{a}_L(\omega) < \tilde{a}_L$). If the court chooses $a_L < \tilde{a}_L$, then the stage-payoff (which will be zero) is outweighed by the reputational gains; the court will want to be more intensely strategic. By contrast, if the court chooses $a_L > \tilde{a}_L$, then the stage-payoff (β) outweighs the reputational gain; the court will want to be less intensely strategic. The equilibrium is sustained by the court choosing $a_L^* = \tilde{a}_L$ (which implies that the public is indifferent between complying and not) and the public complying at the appropriate rate to keep the court indifferent between its pure actions. For $\pi \in \left(\frac{1}{2}\hat{\pi}(\omega), \hat{\pi}(\omega)\right)$, the court's optimal strategy always involves mixing. Proposition 3 shows that, fixing β, there is some $\tilde{\pi}(\omega) \in \left(\frac{1}{2}\hat{\pi}(\omega), \hat{\pi}(\omega)\right)$ such that the public will always comply if $\pi > \tilde{\pi}$, and the public will comply probabilistically if $\pi < \tilde{\pi}$. This result is illustrated in Figure 2, below.

A direct, and (otherwise counter-intuitive) implication of this analysis is that, as case salience decreases, the public will be more likely to comply with the court's decision to uphold a case, even though this makes strategic behavior by the court more likely.

Figure 2: Equilibrium Policies and Reputation



I introduce some new notation. Recall, the parameters of the model are given by a 7-tuple: $\omega = (\pi, y, \chi, \beta, \delta)$, is a 7-tuple which represents the *ex-ante* reputation, public signal, bias, a pair of salience terms, and a pair of discount factors. Further, recall $\Omega \subset [0,1] \times X^2 \times (0,\infty)^2 \times (0,1)^2$ is the parameter space. Let ω_z denote a 6-tuple that encodes all but one parameter, the missing one being z. For example, ω_y is a vector of parameters excluding the public signal y. Denote Ω_z as the space of parameters sans parameter z. Clearly $(w_z, z) \in \Omega$. Let $S \subset \Omega$ be the set of parameters for which the court behaves sincerely, and let $S(z) \subset \Omega_z$ denote the set of remaining parameters for which the court behaves sincerely, fixing the value of parameter z.

Lemma 5. *A rational court will be 'more likely' to behave sincerely if: (i) it's reputation is higher, (ii) it is less biased, (iii) the case is more salient, or (iv) it is less patient. More formally: (i) $S(\pi') \subset S(\pi)$ if $\pi > \pi'$, (ii) $S(\chi') \subset S(\chi)$ if $0 < \chi < \chi'$, (iii) $S(\beta_r') \subset S(\beta_r)$ if $\beta_r > \beta_r'$ and (iv) $S(\delta') \subset S(\delta)$ if $\delta < \delta'$.*

Lemma 5 determines the relationship between the size of parameters and the 'likelihood' that the court will behave sincerely. In stating this Lemma, I acknowledge an abuse of terminology — there is no uncertainty about whether the court behaves sincerely or not; it either does, or it doesn't. In this context, 'more likely' indicates that sincere strategies will be chosen over a larger[17] set of parameters. Of course, to the extent that many parameters are generated by random processes, this implies a greater likelihood (in the natural sense), *ex ante*.

Most of the results in Lemma 5 are intuitive. For example, a court with a higher reputation is more likely to have its decisions believed by the public, and so the policy-incentive to implement the correct decision is larger. At the same time, the net reputational gain from behaving strategically is lower, since the reputational gain from choosing $A = 1$ is smaller (as the public's belief that the court is publicly-minded increases, the probability it assigns to seeing cases overturned increases as well — which in turn reduces the informational content (about types) from overturning cases) and the reputational loss from choosing $A = 0$ is similarly smaller. Hence, overall the incentives to behave sincerely become even stronger as π increases. Similarly, as bias increases, the public is less likely to believe in the correctness of the court's decisions *ceteris paribus* and actions contain more informational content, since the rational court's behavior is 'further'from that of the pubicly-minded court. The remaining cases are analogous.

The next proposition characterises the relationship between the public signal and the likelihood of behaving sincerely.

Proposition 4. *Suppose $\chi > 0$ and $x < \chi$. There exist functions $\underline{y}(\pi, \chi, \beta, \delta) \in X$ and $\bar{y}(\pi, \chi, \beta, \delta) \in X$, with $\underline{y} \leq \bar{y}$, such that the court behaves sincerely by choosing $a_L^*(\omega) = 0$ only if $y \in (\underline{y}, \bar{y})$. Whenever $y \leq \underline{y}$ or $y \geq \bar{y}$, the court strategically over-turns acceptable cases to tend to its reputation.*

Proposition 4 demonstrates the relationship between the public signal, and the likelihood that the court will behave strategically when faced with a case that it would uphold. The proposition demonstrates that the court's behavior is non-monotonic — courts are more likely to behave strategically (i.e. by ruling incorrectly) when cases are 'clear-cut' than when cases are indeterminate or controversial. At first blush, seems partly counter-intuitive. Being with the intuitive case. Suppose the court would ideally uphold a decision, but the public receives a very strong signal that the case is unacceptable. The public knows that a sincere rational court will uphold any case $x < \chi$, whilst the publicly-minded court will only uphold cases that satisfy $x < 0$. Given the assumptions on the signal process, for signals that are

[17]where the size of sets is ordered by the notion of set inclusion.

extreme enough, the public determines the conditional probability $\Pr[x < 0|x < \chi] = 0$, and so immediately concludes that the court is rational. Behaving sincerely causes the court to completely lose its reputation. Hence, the court will strategically find over-turn the case, even though it would ideally uphold it.

The more interesting and counter-intuitive case arises when the public receives a very strong signal that the case is acceptable. Now, as a matter of policy, both types of courts would want to uphold the policy. However, the public knows that the publicly-minded court will overturn the case if the case satisfies $x > 0$, whilst a sincere rational court will only do so if $x > \chi$. If the public observes a decision to overturn, it realizes that the true case must satisfy $x > 0$ (assuming sincere behavior). But if it's signal is extreme enough, the public determines the conditional probability $\Pr[x > \chi|x > 0] = 0$, and so immediately concludes that the court is publicly-minded. Hence, the rational court can perfectly build its reputation by strategically overturning a policy it knows to be acceptable.

In both these cases, the assumption of sincere behavior creates a strong incentive for the court to behave strategically when 'clear-cut' cases arise. Obviously, this cannot be sustained in equilibrium. It follows that in equilibrium, the court must strategically do the wrong thing. By contrast, if the case facts are close to the relevant thresholds (0 and χ), the public cannot quite so easily diagnose the agents' types, and so the reputational gains and loses are not quite so large. This provides the court with more scope to behave sincerely.

*** Need to do comparative statics when the court is strategic. Effect on the probability of overturning acceptable cases. Effect of other parameters on $\underline{y}$ and $\overline{y}$. ***

4.4 Opposite Bias and the Docket Effect

Thus far, the analysis has focused on the case when the rational court is more accommodating of government policy making than the public would ideally have it be. The opposite case, where court is less accommodating (or more hostile) is analogous. All of the main results from above, carry through, albeit inverted. We have:

Lemma 6. *If $\chi < 0$, then the court's equilibrium strategy is $a^*(x,\omega)$, where $a^*(x,\omega) = a_L^* = 0$ whenever $x < \chi$ and $a^*(x,\omega) = a_H^*(\omega) \geq \frac{H(\chi|y)}{H(0|y)}$ when $x > \chi$. In the latter case, we have $a_H^* = 1$ if*

$$(1-\delta_r)\,\beta_r \mathbf{1}\left[\rho_1(\omega;1) \geq \frac{1}{2}\right] \geq \delta_r\left[V\left(\Pi_0(\omega;1)\right) - V\left(\Pi_1(\omega;1)\right)\right]$$

If not, the court plays a mixed strategy, and overturns the policy with probability $a_H^*(\omega)$ *implicitly defined by:*

$$(1-\delta_r)\beta_r \mathbf{1}\left[\rho_1(\omega; a_H^*) \geq \frac{1}{2}\right] = \delta_r \left[V\left(\Pi_0\left(\omega; a_H^*(\omega)\right)\right) - V\left(\Pi_1\left(\omega; a_H^*(\omega)\right)\right)\right]$$

It should be clear that the problem for the hostile court can be reformulated (by redefining variables) in such a way as to make it identical to the problem of the accommodating court. (I.e. let the set of actions be $\mathcal{A} \in \{0,1\}$ where $\mathcal{A} = 1$ now has the interpretation of uphold rather than overturn. Let the strategies be $\alpha \in [0,1]$, where α is the probability of upholding, rather than the probability of overturning; and let $\mathcal{H}$ be the conditional distribution of the true case x, given signal y, and given the reverse ordering of cases $\mathcal{X}$. It can be easily shown that $\mathcal{H}$ is related to the counter-cumulative distribution of H, according to: $\mathcal{H}(x|y) = 1 - H(-x|-y)$.

Although the problems are the structurally the same, and the strategic incentives are identical, the behavior of the two types of courts will not generically be symmetric, and the likelihood of strategic behavior will be generically differ. For concreteness, consider two courts whose biases are equal in magnitude but opposite in direction. Suppose both courts hear a case with public signal 0. Hence the situations and incentives are (almost) perfectly symmetric. Finally, assume that the public believe cases are drawn from distribution F with mean μ. For concreteness let $\mu < 0$, so that the public believe that government policies will be acceptable, on average. Although the public signal indicates that the policy is just on the threshold of being unacceptable, given the public's prior belief that the average cases will be acceptable, after Bayesian updating, the public must put more weight on the case being acceptable rather than not. Hence, inspite of the situation being seemingly symmetric, the public it will be more suspicious of a potentially left-biased (hostile) court overturning the case, than of a potentially right-biased (accommodating) court upholding it. As such, when the public trusts the government, a left-biased court will in general have more incentive to behave strategically, than an equally right-biased court. The opposite is true, if the public distrusts the government, and expects it to regularly push the boundaries of what is acceptable.

Remark 2. The strategic incentives for courts with opposite biases will generically not coincide, unless $H(x|y) = 1 - H(-x|-y)$ (which in turn will not generically hold true, unless $F(\cdot)$ is symmetric about 0, and $G(\cdot|x)$ is symmetric about x.)

The above discussion suggests important considerations for efficiency that arising from not all the magnitude of judicial bias, but the direction of the bias as well. Moreover, it highlights the important role that the court's docket plays in the strategic incentives for the court. A court, with a docket of cases that are *ex ante* expected to be found acceptable, must be more weary of overturning cases than a court with docket of cases that are more likely to be found unacceptable. This creates an important strategic consideration for judicial actors. It also introduces an interesting strategic considerations for the *certiorari* decisions of courts that have partially or completely discretionary dockets — since now the nature of the docket affects the way in which the public perceives the court's rulings. I extend the model to include *certiorari* decisions, in a later section.

4.5 Efficiency

Issues to consider. How often does the court rule incorrectly? How often does the public detect (and ignore) bad rulings? What are the incidences of type I (the court rules correctly but the public does not comply) and type II (the court rules incorrectly and the public complies) errors? How does this vary with certain preference parameters? Benchmark these against the rate of 'incorrect' decisions when the court is unconstrained in its ability to rule (and have its decisions enforced) — i.e. where there is no possibility for the principal to incentivize the agent. (Clearly, the probability of a bad decision sans incentives is $\int_0^{\chi} dF(x) = F(\chi) - F(0)$.)

The equilibrium probability of a bad decision is:

$$\begin{aligned}
& \int_{\underline{x}}^{0} \left[\int_{\omega \in \Omega} a_L^* (x, \omega)\, d\mathcal{W}(\omega) \right] dF(x) + \int_0^{\chi} \left[\int_{\omega \in \Omega} (1 - a_L^* (x, \omega))\, d\mathcal{W}(\omega) \right] dF(x) \\
= & \int_0^{\chi} dF(x) + \int_{\underline{x}}^{0} \left[\int_{\omega \in \Omega} a_L^* (x, \omega)\, d\mathcal{W}(\omega) \right] dF(x) - \int_0^{\chi} \left[\int_{\omega \in \Omega} a_L^* (x, \omega)\, d\mathcal{W}(\omega) \right] dF(x)
\end{aligned}$$

Hence, the strategic use of compliance by the public increases the likelihood of generating correctly rendered decisions provided that:

$$\int_{\underline{x}}^{0} \left[\int_{\omega \in \Omega} a_L^* (x, \omega)\, d\mathcal{W}(\omega) \right] dF(x) \leq \int_0^{\chi} \left[\int_{\omega \in \Omega} a_L^* (x, \omega)\, d\mathcal{W}(\omega) \right] dF(x)$$

5 Long Run

Consistent with standard results in the reptutational literature, excepting for an event that causes the reputational game to reset (perhaps due to behavioral considerations, such as bounded memory or other cognitive failres?), the public will perfectly learn the agent's type in the long run, and so the court's interest in tending to its reputation can at most be a short-run phenomenon.

Proposition 5. *The public will eventually learn the court's true type.* $\pi_t \to 0$ *almost surely as* $t \to \infty$.

Proposition 5 is an immediate consequence of the martingale convergence theorem. The interpretation of this proposition requires an important caveat — the result is true from the perspective of a modeller, observing the proces from without. Naturally, from the perspective of the public, who form beliefs according to Bayes' Rule, the court's reputation follows a standard martingale (i.e. $E[\pi_{t+1}] = \pi_t$). Given that the process is bounded, the public is aware that it will eventually place probability 1 on the court having a particular type. (This follows again from the martingale convergence theorem.) However, the public cannot know whether they will eventually learn that the court is the publicly-minded type, or the rational type.

6 Extensions

6.1 Discretionary Docket

6.2 Precedent as a Reputational Device

In this extension, I consider a variant of the model, where the court must decide cases in the shadow of existing precedent. With each case, the court potentially receives evidence that the existing precedent was either incorrectly decided or that the case ought to be distinguished for some reason. This evidence is not perfectly obseved by the public. The court can build reputation by adhering to precedent, to mimic the procedurally-motivated type court.

The analysis can shed light on the incentives for courts to adhere to or abandon existing precedents, and thereby microfound the norm of *stare decisis* as equilibrium behavior by courts who have reputational concerns.

7 Appendix

Proof of Proposition 1. Let $\rho_0(\omega), \rho_1(\omega), \Pi_0(\omega)$ and $\Pi_1(\omega)$ be arbitrary, continuous functions bounded between 0 and 1. Let F be the set of bounded, continuous functions on $[0,1]$, and let $v(\pi)$ be an arbitrary element of F. Take any $w \in F$ and define:

$$c_A^w(\omega) = \arg\max_{c\in[0,1]} \left[c_A\rho_A(\omega) + (1-c_A)(1-\rho_A(\omega)) + \delta_p w(\Pi_A(\omega))\right]$$

where $A \in \{0,1\}$. Note that the continuation payoff, $w(\Pi_A(\omega))$ is independent of c_A, and so $c_A^{v,w} = \arg\max_{c\in[0,1]}\left[c_A\rho_A(\omega) + (1-c_A)(1-\rho_A(\omega))\right]$ is independent of v and w. (*** Check if mixing affects this ***) Hence, $c_A^{v,w}(\omega) = c_A(\omega)$ for all $v, w \in F$. In particular: $c_A^{v,w} = 1$ if $\rho_A(\omega) > \frac{1}{2}$, $c_A^{v,w} = 0$ if $\rho_A(\omega) < \frac{1}{2}$ and $c_A^{v,w} = \hat{c}_A \in [0,1]$ if $\rho_A(\omega) = \frac{1}{2}$.

Now, take any $v \in F$ and define:

$$\begin{aligned} a^v(x,\omega) &= \arg\max_{a\in[0,1]} a\left(c_1(\omega)\beta_r \mathbf{1}[x > \chi] + \delta_r v(\Pi_1(\omega))\right) + \\ &\qquad (1-a)\left(c_0(\omega)\beta_r\mathbf{1}[x<\chi] + \delta_r v(\Pi_0(\omega))\right) \end{aligned}$$

Let $T : F \to F$ be a functional operator, with

$$\begin{aligned} T^V[v](\pi) &= \int_{x\in X}\int_{\omega\in\Omega}\Big\{a^v(x,\omega)\left(c_1(\omega)\beta_r\mathbf{1}[x>\chi] + \delta_r v(\Pi_1(\omega))\right) \\ &\quad + (1-a^v(x,\omega))\left(c_0(\omega)\beta_r\mathbf{1}[x>\chi] + \delta_r v(\Pi_0(\omega))\right)\Big\} d\mathcal{W}(\omega)\, dF(x) \end{aligned}$$

I show that T is a contraction mapping. It suffices to check Blackwell's sufficient conditions.

Let $v_A \geq v_B$. Then:

$$\begin{aligned}
T[v_A](\pi) &= \int_{x\in X}\int_{\omega\in\Omega}\Big\{a^{v_A}(x,\omega)\left(c_1(\omega)\beta_r\mathbf{1}[x>\chi]+\delta_r v_A(\Pi_1(\omega))\right) \\
&\quad +\left(1-a^{v_A}(x,\omega)\right)\left(c_0(\omega)\beta_r\mathbf{1}[x>\chi]+\delta_r v_A(\Pi_0(\omega))\right)\Big\}d\mathcal{W}(\omega)\,dF(x) \\
&\geq \int_{x\in X}\int_{\omega\in\Omega}\Big\{a^{v_B}(x,\omega)\left(c_1(\omega)\beta_r\mathbf{1}[x>\chi]+\delta_r v_A(\Pi_1(\omega))\right) \\
&\quad +\left(1-a^{v_B}(x,\omega)\right)\left(c_0(\omega)\beta_r\mathbf{1}[x>\chi]+\delta_r v_A(\Pi_0(\omega))\right)\Big\}d\mathcal{W}(\omega)\,dF(x) \\
&\geq \int_{x\in X}\int_{\omega\in\Omega}\Big\{a^{v_B}(x,\omega)\left(c_1(\omega)\beta_r\mathbf{1}[x>\chi]+\delta_r v_B(\Pi_1(\omega))\right) \\
&\quad +\left(1-a^{v_B}(x,\omega)\right)\left(c_0(\omega)\beta_r\mathbf{1}[x>\chi]+\delta_r v_B(\Pi_0(\omega))\right)\Big\}d\mathcal{W}(\omega)\,dF(x) \\
&= T[v_B](\pi)
\end{aligned}$$

where the first inequality follows since $a^{v_A}(x,\omega)$ is the optimal policy function, whilst a^{v_B} is only feasible; and the second inequality follows since $v_A(\pi) \geq v_B(\pi)$. This confirms monotonicity. Next, consider:

$$\begin{aligned}
T[v+c](\pi) &= \int_{x\in X}\int_{\omega\in\Omega}\Big\{a^{v}(x,\omega)\left(c_1(\omega)\beta_r\mathbf{1}[x>\chi]+\delta_r[v(\Pi_1(\omega))+c]\right) \\
&\quad +\left(1-a^{v}(x,\omega)\right)\left(c_0(\omega)\beta_r\mathbf{1}[x>\chi]+\delta_r[v(\Pi_0(\omega))+c]\right)\Big\}d\mathcal{W}(\omega)\,dF(x) \\
&= \int_{x\in X}\int_{\omega\in\Omega}\Big\{a^{v}(x,\omega)\left(c_1(\omega)\beta_r\mathbf{1}[x>\chi]+\delta_r v(\Pi_1(\omega))\right) \\
&\quad +\left(1-a^{v}(x,\omega)\right)\left(c_0(\omega)\beta_r\mathbf{1}[x>\chi]+\delta_r v(\Pi_0(\omega))\right)\Big\}d\mathcal{W}(\omega)\,dF(x)+\delta_r c \\
&= T[v](\pi)+\delta_r c
\end{aligned}$$

where $\delta_r < 1$, which verifies discounting. Hence, T is a contraction mapping that admits a unique fixed point, $\hat{V}(\pi;\rho_0,\rho_1,\Pi_0,\Pi_1)$. For notational simplicity, denote $\theta(\omega) = (\rho_0(\omega),\rho_1(\omega),\Pi_0(\omega),\Pi_1(\omega))$. Since $T[v]$ is continuous in θ for all $v \in F$, so is the fixed point $\hat{V}$.

For each $\theta \in [0,1]^4$, let $\hat{V}(\pi;\theta)$ be the associated value function and $a^{\theta}(x,\omega)$ be the associated policy function. By Berge's Theorem, a^{θ} is a upper-hemi-continuous in θ. Define:

$$\begin{aligned}
R_1(\theta) &= \frac{\pi(1-H(0|y)) + (1-\pi)\int_0^{\bar{x}} a^{\theta}(x,\omega)\, dH(x|y)}{\pi(1-H(0|y)) + (1-\pi)\int_{\underline{x}}^{\bar{x}} a^{\theta}(x,\omega)\, dH(x|y)} \\
R_0(\theta) &= \frac{\pi H(0|y) + (1-\pi)\int_{\underline{x}}^{0} \left[1-a^{\theta}(x,\omega)\right] dH(x|y)}{\pi H(0|y) + (1-\pi)\int_{\underline{x}}^{\bar{x}} \left[1-a^{\theta}(x,\omega)\right] dH(x|y)}
\end{aligned}$$

$$\begin{aligned}
P_1(\theta) &= \frac{\pi(1-H(0|y))}{\pi(1-H(0|y)) + (1-\pi)\int_{\underline{x}}^{\bar{x}} a^{\theta}(x,\omega)\, dH(x|y)} \\
P_0(\omega) &= \frac{\pi H(0|y)}{\pi H(0|y) + (1-\pi)\int_{\underline{x}}^{\bar{x}} \left[1-a^{\theta}(x,\omega)\right] dH(x|y)}
\end{aligned}$$

Since R_1, R_0, Π_1 and Π_0 are continuous functions of a^{θ}, then they are upper-hemicontinuous in θ. Let $\Theta(\theta) = (R_1(\theta), R_0(\theta), \Pi_1(\theta), \Pi_0(\theta))$. Clearly $\Theta(\theta)$ is upper-hemicontinuous in θ as well. Then, by Glicksburg's Theorem, Θ contains a fixed point $\theta^* = (\rho_0^*(\omega), \rho_1^*(\omega), \Pi_0^*(\omega), \Pi_1^*(\omega))$. (*** Prove uniqueness ***) By construction, these are the equilibrium belief functions. Furthermore $a^*(x,\omega) = a^{\theta^*}(x,\omega)$ is the equilibrium policy function (again this follows immediately by construction), and $V(\pi) = \hat{V}(\pi;\theta^*)$ is the equilibrium value function of the court.

Finally, let $S: F \to F$ be a functional mapping, where: □

and

$$\begin{aligned}
S[w](\pi) = & \int_{\omega\in\Omega}\int_{x\in X} \Big\{ a^*(x,\omega)\left[c_1(\omega)\rho_1^*(\omega) + (1-c_1(\omega))(1-\rho_1^*(\omega)) + \delta_p w(\Pi_1^*(\omega))\right] \\
& + (1-a^*(x,\omega))\left[c_0(\omega)\rho_0^*(\omega) + (1-c_0(\omega))(1-\rho_0^*(\omega)) + \delta_p w(\Pi_0^*(\omega))\right] \Big\} dH(x|y)\, d\mathcal{W}(\omega)
\end{aligned}$$

It is straight-forward to show that S satisfies Blackwell's sufficiency conditions, and is, as such, a contraction mapping. Hence S admits a unique fixed point $W(\pi)$.

Proof of Lemma 1. □

Proof of Lemma 2. See proof of Proposition 1. □

Proof of Lemma 3. For concreteness, consider the case of $\chi > 0$. First, consider the reputational consequences that stem from the court's choices. If the court chooses $A = 1$, then public updates its beliefs about the court's type according to Bayes Rule:

$$\begin{aligned}\Pi_1(\omega) &= \frac{\pi H(0|y)}{\pi H(0|y) + (1-\pi)\left[a_L^*(\omega) H(\chi|y) + a_H^*(\omega)(1 - H(\chi|y))\right]} \\ &= \frac{\pi H(0|y)}{\pi H(0|y) + (1-\pi) E\left[a^*(x,\omega)|y\right]}\end{aligned}$$

where $E\left[a^*(x,\omega)|y\right]$ is the expected probability that the rational court will choose $A = 1$, given public signal y. Similarly, if $A = 0$:

$$\begin{aligned}\Pi_0(\omega) &= \frac{\pi(1 - H(0|y))}{\pi(1 - H(0|y)) + (1-\pi)\left[(1 - a_L^*(\omega)) H(\chi|y) + (1 - a_H^*(\omega))(1 - H(\chi|y))\right]} \\ &= \frac{\pi - \pi H(0|y)}{1 - \left[\pi H(0|y) + (1-\pi) E\left[a^*(x,\omega)|y\right]\right]}\end{aligned}$$

With a little algebra, we can show that $\Pi_1(\omega) \geq \pi \geq \Pi_0(\omega)$ provided that $1 - H(0|y) \geq E\left[a^*(x,\omega)|y\right]$ and that the consequent inequalities are both strict if the antecedent is. (This is intuitive. If the condition holds, then for a given y, the rational court is less likely to choose $A = 1$ than the publicly-minded court. Hence, upon observing $A = 1$, the public should update its belief (that the court is publicly-minded) favorably, and its update should be unfavorable after observing $A = 0$.)

I now show that this condition indeed holds. Suppose not. I.e. Fix any $y \in X$ and suppose $1 - H(0|y) < E\left[a^*(x,\omega)|y\right]$. Now, by the same logic as above, choosing $A = 0$ improves reputation. If $x < \chi$, choosing $A = 0$ benefits the rational court both in that it implements its desired outcome and makes reputational gains. Hence $a_L^*(\omega) = 0$. If $x > \chi$, the policy and reputational goals conflict, and so the optimal strategy depends on the relevant size of these. Regardless, we have the following result:

$$\begin{aligned}E\left[a^*(x,\omega)|y\right] &= a_L^*(\omega) H(\chi|y) + a_H^*(\omega)(1 - H(\chi|y)) \\ &= a_H^*(\omega)(1 - H(\chi|y)) \\ &\leq 1 - H(\chi|y) \\ &\leq 1 - H(0|y)\end{aligned}$$

which contradicts the assumption that $1 - H(0|y) < E\left[a^*(x,\omega)|y\right]$.

Hence $1 - H(0|y) \geq E\left[a^*(x,\omega)|y\right]$ and so choosing $A = 1$ never decreases reputation. Then, by a similar argument to the above, $a_H^*(x,\omega) = 1$. To ensure the inequality is maintained, we have: $a_L^*(\omega) \leq \frac{H(\chi|y)-H(0|y)}{H(\chi|y)} = 1 - \frac{H(0|y)}{H(\chi|y)}$. □

Proof of Lemma 4. By direct calculation. □

Proof of Proposition 2. The first part of the proposition is obvious. Suppose $x < \chi$. Let a_L be the strategy of the court anticipated by the public. If the court chooses $A = 0$, it's utility is $\beta_r \mathbf{1}\left[\rho_0(\omega; a_L) > \frac{1}{2}\right] + \delta_r V(\Pi_0(\omega; a_L))$, whilst if it chooses $A = 1$, it's utility is $\delta_r V(\Pi_1(\omega; a_L))$. Suppose:

$$\beta_r \mathbf{1}\left[\rho_0(\omega; 0) > \frac{1}{2}\right] > \delta_r \left[V(\Pi_1(\omega; 0)) - V(\Pi_0(\omega; 0))\right]$$

Since $\rho_0(\omega; a_L)$ is increasing in a_L, and $V(\Pi_1(\omega; 0)) - V(\Pi_0(\omega; 0))$ is decreasing in a_L, then it follows that:

$$\beta_r \mathbf{1}\left[\rho_0(\omega; a_L) > \frac{1}{2}\right] > \delta_r \left[V(\Pi_1(\omega; a_L)) - V(\Pi_0(\omega; a_L))\right]$$

for all $a \in [0, a_L]$. Choosing $A = 0$ is the dominant action, regardless of the public's beliefs about the Court's strategy. Hence, in equilibrium $a_L^*(\omega) = 0$ in this case.

Now, suppose this condition does not hold. — i.e. suppose $\beta_r \left(\mathbf{1}\left[\rho_0(\omega; 0) > \frac{1}{2}\right]\right) < \delta_r \left[V(\Pi_1(\omega; 0)) - V(\Pi_0(\omega; 0))\right]$. There are two possibilities: First, if $\rho_0(\omega; \bar{a}_L) < \frac{1}{2}$, then $\beta_r \mathbf{1}\left[\rho_0(\omega; a_L) > \frac{1}{2}\right] = 0$ for all $a_L \in [0, \bar{a}_L]$, since ρ_0 is increasing in a_L. However, by Lemma 4, $\delta_r \left[V(\Pi_1(\omega; a_L^*(\omega))) - V(\Pi_0(\omega; a_L^*(\omega)))\right]$ is strictly positive for all $a_L \in [0, \bar{a}_L)$ and is zero at $a_L = \bar{a}_L$. Then if the public believes $a_L < \bar{a}_L$, the court has a strict incentive to choose $A = 1$, which implies $a_L^*(\omega) = 1$. But, by Lemma 3, $a_L^* \leq \bar{a}_L < 1$ — which gives a contradiction. Hence $a_L^* = \bar{a}_L$. The public beliefs about the court's strategies keeps the court indifferent between its actions.

Second, suppose $\rho_0(\omega; \bar{a}_L) > \frac{1}{2}$, then for a_L large enough, the public will accept the court's decision. Evidently there cannot be an equilibrium in pure strategies. Denote

$$\eta(\omega; a_L) = \beta_r \left(\mathbf{1}\left[\rho_0(\omega; a_L) > \frac{1}{2}\right] + c_0^*(\omega)\, \mathbf{1}\left[\rho_0(\omega; a_L) = \frac{1}{2}\right]\right) - \delta_r \left[V(\Pi_1(\omega; a_L(\omega))) - V(\Pi_0(\omega; a_L(\omega)))\right]$$

, where we now explicitly consider the effect of random compliance. By assumption $\eta(\omega; 0) < 0$ and $\eta(\omega; \bar{a}_L) > 0$ (where this latter result follows from the fact that $\eta(\omega; \bar{a}_L) = \beta_r > 0$).

Furthermore, η is upper-hemi-continuous in a_L, since it is continuous everywhere except $\rho_0(\omega, a_L) = \frac{1}{2}$, and compliance randomization convexifies utility in this case. Hence, there is some $a_L^* \in (0, \bar{a}_L)$ s.t. $\eta(\omega; a_L^*) = 0$. $\square$

Proof of Proposition 3. I begin by verifying that $\hat{a}_L(\omega)$ and $\tilde{\pi}(\omega)$ are well defined. Since $V(\Pi_1(\omega, a_L)) - V(\Pi_0(\omega, a_L))$ is decreasing in a_L, if $\beta_r > \delta_r [V(\Pi_1(\omega, 0)) - V(\Pi_0(\omega, 0))]$, then $\beta_r > \delta_r [V(\Pi_1(\omega, a_L)) - V(\Pi_0(\omega, a_L))]$ for all $a_L \in [0, \bar{a}_L]$. Hence, set $\hat{a}_L = 0$. Suppose $\beta_r < \delta_r [V(\Pi_1(\omega, 0)) - V(\Pi_0(\omega, 0))]$. Since $\Pi_1(\omega, \bar{a}_L) = \Pi_0(\omega, \bar{a}_L)$ then since $\beta_r > \delta_r [V(\Pi_1(\omega, \bar{a}_L)) - V(\Pi_0(\omega, \bar{a}_L))] = 0$. Finally, since $V(\Pi_1(\omega, a_L)) - V(\Pi_0(\omega, a_L))$ is continuous and decreasing in a_L, by the Intermediate Value Theorem, there exists $\hat{a}_L(\omega) \in (0, \bar{a}_L(\omega))$ s.t. $\beta_r = \delta_r [V(\Pi_1(\omega, \hat{a}_L)) - V(\Pi_0(\omega, \hat{a}_L))]$.
Next, note that $\rho_0(\omega, a_L) > \frac{1}{2}$ whenever $\pi > 2\hat{\pi}$. (To see this, note that $\rho_0(\omega, a_L) \geq \rho_0(\omega, 0) = \frac{H(0|y)}{\pi H(0|y) + (1-\pi) H(\chi|y)} > \frac{1}{2}$, implies $\pi > \frac{H(\chi|y) - 2H(0|y)}{H(\chi|y) - H(0|y)} = 2\hat{\pi}(\omega)$.) Similarly, $\rho_0(\omega, 0) < \frac{1}{2}$ whenever $\pi < 2\hat{\pi}(\omega)$. Now, we can verify that $\tilde{a}_L(2\hat{\pi}(\omega), \omega) = 0$ and $\tilde{a}_L(\hat{\pi}(\omega)) = \bar{a}_L(\omega)$. Suppose $\beta_r < \delta_r [V(\Pi_1(\omega, 0)) - V(\Pi_0(\omega, 0))]$. Then, by construction, $\hat{a}_L(\pi, \omega) > 0$ if $\pi < 2\hat{\pi}(\omega)$, since $0 = \beta_r \mathbf{1}[\rho_0(\omega; 0)] < \delta_r [V(\Pi_1(\omega, 0)) - V(\Pi_0(\omega, 0))]$. Hence $\tilde{a}_L(2\hat{\pi}, \omega) = 0 < \hat{a}_L(\pi, \omega)$. Similarly, note that $\rho_0(\omega, a_L) \leq \rho_0(\omega, \bar{a}_L(\omega)) < \frac{1}{2}$ whenever $\pi < \hat{\pi}(\omega)$. Hence, $\square$

Proof of Lemma 5. First note that: (i) $\rho_0(\omega, 0) = \frac{H(0|y)}{\pi H(0|y) + (1-\pi) H(\chi|y)}$ is increasing in π and decreasing in χ (for $\chi > 0$), ; (ii) $\Pi_0(\omega, 0) = \frac{1}{1 + \frac{1-\pi}{\pi} \frac{H(\chi|y)}{H(0|y)}}$ is increasing in π and decreasing in χ; and (iii) $\Pi_1(\omega, 0) = \frac{1}{1 + \frac{1-\pi}{\pi} \frac{1-H(\chi|y)}{1-H(0|y)}}$ is decreasing in π and increasing in χ; in each case because $H(\chi|y) > H(0|y)$.

Consider each part of the Lemma in turn. First reputation π. Suppose $\omega_\pi \in S(\pi)$, so that $(1 - \delta_r) \beta_r \mathbf{1} \left[\rho_0(\omega_\pi, \pi; 0) \geq \frac{1}{2}\right] \geq \delta_r [V(\Pi_1(\omega_\pi, \pi; 0)) - V(\Pi_0(\omega_\pi, \pi; 0))]$. Then since the LHS is increasing in π and the RHS is decreasing in π, it follows that $(1 - \delta_r) \beta_r \mathbf{1} \left[\rho_0(\omega_\pi, \pi'; 0) \geq \frac{1}{2}\right] \geq \delta_r [V(\Pi_1(\omega_\pi, \pi'; 0)) - V(\Pi_0(\omega_\pi, \pi'; 0))]$ for any $\pi' > \pi$. Hence $\omega_\pi \in S(\pi')$ and so $S(\pi) \subset S(\pi')$. The proof for bias χ is analogous. Now consider case salience β_r, and suppose that inequality holds for (ω_β, β_r), so that $\omega_\beta \in S(\beta_r)$. Since neither $\rho_0(\omega; 0)$, $\Pi_0(\omega; 0)$ nor $\Pi_1(\omega; 0)$ depend on β_r, it only affects the expression directly through its effect on stage utility. Since LHS is increasing in β_r, and the RHS is unaffected, it must be that the inequality holds for any (ω_β, β_r') with $\beta_r' > \beta_r$. Hence $\omega_\beta \in S(\beta_r')$ and so $S(\beta_r) \subset S(\beta_r')$. The proof for the comparative static on patience, δ, is analogous. $\square$

Proof of Proposition 4. In the entire analysis, suppose $x < \chi$, so that the court would ideally uphold the policy. Fix ω_y — i.e. the parameters other than the public signal y.

Suppose equation (1) does not hold for any $y \in X$. Then the proposition is trivially satisfied by assigning $\underline{y} = z = \bar{y}$ for any $z \notin X$. Suppose the equation holds for all $y \in X$. Then the proposition is satisfied by choosing $\underline{y} = \underline{x}$ and $\overline{y} = \bar{x}$.

Finally, suppose there is some $\hat{y}$ s.t. (1) is satisfied with strict equality. By the vanishing tails property, $\lim_{y \to \bar{x}} \rho_0 (\omega_y, y; 0) = 0$, $\lim_{y \to \bar{x}} \Pi_0 (\omega_y, y; 0) = 0$ and $\lim_{y \to \bar{x}} \Pi_1 (\omega_y, y; 0) = \pi$. Hence, as y becomes increasingly large, the reputational considerations outweigh the policy preference, and the court has a strict incentive to be strategic. I.e. the inequality in equation (1) reverses. Since all functions are continuous, there exists a $\bar{y} \in (\hat{y}, \bar{x})$ s.t. equation (1) holds with equality, by the intermediate value theorem. (If there are several such points, take the supremum.) By continuity, (1) is not satisfied for all $y > \bar{y}$, and so the court must behave strategically.

A similar argument holds as $y \to \underline{x}$, noting that $\lim_{y \to \underline{x}} \rho_0 (\omega_y, y; 0) = 1$, $\lim_{y \to \underline{x}} \Pi_0 (\omega_y, y; 0) = \pi$ and $\lim_{y \to \underline{x}} \Pi_1 (\omega_y, y; 0) = 1$. If $(1 - \delta_r) \beta_r \geq \delta_r [V(1) - V(\pi)]$, then the court will behave strategically, and $\underline{y} = \underline{x}$. Else, by the intermediate value theorem, there exists some $\underline{y} \in (\underline{x}, \hat{y})$, such that the court behaves strategically whenever $y < \underline{y}$. $\square$

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