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ON THE DESIGN OF THE APPEALS  
PROCESS: THE OPTIMAL USE OF  
DISCRETIONARY REVIEW  
VERSUS DIRECT APPEAL

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## **On the Design of the Appeals Process:**

### **The Optimal Use of Discretionary Review versus Direct Appeal**

Steven Shavell\*

*The socially desirable design of the appeals process is analyzed assuming that it may involve either an initial discretionary review proceeding – under which the appeals court would decide whether to hear an appeal – or else a direct appeal. Using a stylized model, I explain that the appeals process should not be employed when the appellant’s initial likelihood of success falls below a threshold, that discretionary review should be used when the likelihood of success lies in a mid-range, and that direct appeal should be sought when this likelihood is high. Further, I emphasize that appellants should often be able to choose between discretionary review and direct appeal, notably because appellants may beneficially elect discretionary review to save themselves (and the judicial system) expense. This suggests the desirability of a major reform of our appeals process: appellants should be granted the right of discretionary review along with the right that they now possess of direct appeal at the first level of appeals.*

JEL Classification: K4, K41

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## **1. Introduction**

The object of this article is to analyze the socially desirable design of the appeals process. I assume that in principle this process may involve either an initial discretionary review proceeding – under which the appeals court would decide whether to hear an appeal – or else a direct appeal. I show in a stylized model that under broad circumstances, it is best that appellants enjoy the right to choose between discretionary review and direct appeal. A primary reason is that appellants would often desire discretionary review in order to spare themselves the expense of a full hearing when their cases were determined to be unpromising, and as a byproduct they would save the courts and opposing litigants expense as well.

This often theoretically advantageous design of the appeals process differs from reality. As I observe, discretionary review and direct appeal never co-exist as options for appellants. That suggests the desirability of a major reform of our appeals process: at the first level of appeals, let appellants be granted the right of discretionary review along with the right that they now generally possess of direct appeal. However, because of differences between the private and social value of appeals, the theory I develop does not imply that at the level of the supreme courts appellants should be given the right of direct appeal where, as at the U.S. Supreme Court, they now have only the right of discretionary review.

In Sections 2 and 3 of the article, I present the basic analysis of the optimal design of the appeals system. Section 2 is an informal analysis of a stylized model, making use of numerical examples; Section 3 is a formal analysis and parallels Section 2. I first consider socially best behavior, where social welfare is presumed to depend positively on

the correction of mistaken trial court decisions and to depend negatively on the resource costs of appeals. I explain that if a litigant's initial probability of reversal on appeal is below a certain threshold, the litigant's case will not be socially worthwhile considering under the appeals process; but that if the probability of reversal exceeds the threshold, the case will be worthwhile considering, in which event either discretionary review or direct appeal could be socially superior.

Specifically, discretionary review might be superior to direct appeal because discretionary review allows society to obtain valuable information about the prospects of a case: under discretionary review, society saves the costs of a full appeal when the prospects of the case do not turn out to be sufficiently good to warrant that process. If this expected saving exceeds the cost of discretionary review, discretionary review is socially preferred to direct appeal.

Conversely, direct appeal is socially superior to discretionary review when the cost of discretionary review exceeds the expected saving from avoiding the expense of full appeal. It follows that direct appeal tends to be socially desirable when the appellant's initial probability of success is relatively high.

I therefore conclude that the socially optimal character of the appeals process is this: if the litigant's initial probability of success is below a first threshold, the case should end without any consideration under the appeals process; if the probability of success is between the first threshold and a second higher threshold, the case should be submitted for discretionary review; and if the probability exceeds the second threshold, the case should be directly appealed.<sup>1</sup>

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<sup>1</sup> The magnitudes of the two probability thresholds are determined in the model; they depend on the costs of discretionary review, the costs of appeal, and the social value of reversals. For example, if a

Because the socially desirable manner of resolving cases depends on the appellant's initial probability of success, it is necessary that it is the appellant who decides whether to make use of the appeals process and, if so, whether to employ discretionary review or direct appeal. In other words, it is necessary to harness the information that the appellant naturally possesses about the probability of success for the appeals process to be optimally employed.<sup>2</sup> (The appeals court will have no information about the prospects of a case unless it engages at least in discretionary review, yet whether it should undertake this review is one of the questions at issue.)

The foregoing describes socially best behavior in the model, but the question arises, what behavior will be in the self-interest of appellants and of appeals courts? The self-interest of appellants will at least resemble society's interest and their evaluation of discretionary review versus appeal will thus have the basic character of that which is socially best. In particular, under discretionary review, appellants will save their costs of a full appeal when the prospects of their cases do not turn out to be good. Hence, appellants may well prefer discretionary review to appeal when their initial prospects are uncertain. And appellants will wish to bypass discretionary review and to appeal directly when their initial prospects are sufficiently promising, for then their expected savings from discretionary review would be lower than the cost of such review.

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case is of great importance (the social value of a reversal is high), the probability thresholds above which discretionary review and review should be undertaken will be low – it will be best to for the courts to reconsider the case more often.

<sup>2</sup> This point may be viewed as a generalization of the *raison d'être* for the appeals process itself. The functional rationale for the appeals process is that disappointed litigants would be expected to have information about the possible occurrence of legal error, so that giving these litigants the right to initiate appeals allows society to exploit their information – it focuses higher court reconsideration on cases where legal error was most likely to have occurred. See Shavell (1995) for a development of this rationale.

Although appellants' self-interested use of the appeals process will be qualitatively similar to the socially desirable use of that mechanism, it will not be the same, for two reasons. First, appellants do not bear the full social costs of appeal – they do not pay the opposing appellees' costs or the costs of the judicial system. This difference in the incurring of costs generates a tendency to use the appeals process too often. Second, appellants may not benefit from the outcome of an appeal in the way society would (for example, if a reversal makes new law, that might not be of significance to the appellant).

Potential difficulties involving a difference between the motives of appeals courts and of society may also exist. It is possible, for example, that appeals courts do not weigh the resource costs of adjudication in the manner that society would prefer.

After considering these problems of motives that deviate from society's, I discuss policies that could be employed to ameliorate them, namely, the imposition of fees for use of the appeals process and the use of payments based on the outcome of appeals.

I then examine several extensions to the model. One concerns the possibility that expenditures on discretionary review would reduce the costs of a subsequent appeal, because the tasks undertaken in a discretionary review would otherwise have been performed in an appeal. This possibility increases the desirability of discretionary review; indeed, were all effort in discretionary review effort that would otherwise be exercised in an appeal, discretionary review would be unambiguously superior to direct appeal. Other extensions concern the ability of appellants to alter the character of their legal effort on the basis of the outcome of discretionary review, the possibility that a request for discretionary review would signal to the court that the appellant was uncertain

about success, the mitigation under discretionary review of the problem that attorney self-interest may lead to excessive appeals, and the chance that discretionary review would not result in a superior estimate of the prospects of success of a case.

In Section 4 of the article, I summarize the character of the appeals process in reality. As I indicated above, appellants do not now possess the right to choose between discretionary review and appeal – I find that in all legal systems, whether state-sanctioned or private, appellants either have the right of appeal<sup>3</sup> or of discretionary review, but never both. In common law countries, they typically enjoy the right of appeal at the initial level of appeal, whereas they often must submit to discretionary review at supreme courts. In civil law countries, they usually hold the right of appeal even at supreme courts. I also observe that the volume of appeals is high, absorbing substantial legal resources, and that the majority of appeals fail where appeal is as of right.

In light of this description of the appeals process, I turn in Section 5 to the interpretation of the theoretical analysis. A question that I emphasize is whether a new policy of adding the opportunity of discretionary review to the right of appeal at the first level of appeals would be socially beneficial. I suggest that the answer may well be yes. Presently, the annual volume of appeals in the United States is in the hundreds of thousands, and about three quarters of these appeals fail. I conjecture that much of this waste of appellant and judicial effort could be obviated under the new policy because many of the appellants now bringing appeals would be likely to opt for discretionary review, which might involve significantly less expense (even though “full” appeal now often involves methods of screening cases that may lower judicial burdens). It is also

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<sup>3</sup> By the right of appeal, I refer generally to the right of appeal of a final judicial determination in a case, not necessarily of a prior, interlocutory, decision.

true that many disappointed trial court litigants who today find appeal too costly to bring would be led to ask for discretionary review because this would be less expensive, and that that would be socially beneficial. My recommendation to allow appellants at the first level of appeals courts the option of discretionary review also applies to appeals at supreme courts in civil law countries, where appeal is as of right, and at certain state supreme courts in the United States where the same is true.

I also consider whether, at the level of supreme courts in the United States where appeal is subject to discretionary review, according appellants the right of direct appeal in addition would be likely to be socially desirable. I explain that the rationale for this change is not as strong as for adding the right of discretionary review. Among the reasons I discuss are that the benefit from this step would be mainly to save the expense of discretionary review when an appeal is likely to succeed, but that this savings would be small; and I also discuss the difference between the private and social valuations of the outcomes of appeal as a reason for required discretionary review (for instance, that harmonizing conflicting lower court decisions may have a social value but not a private value).

I comment as well on the feasibility of using fees for appeals and otherwise altering the incentives of parties, policies that I explain in the theoretical analysis are in principle desirable. I conclude that there are substantial impediments to use of such policies, some having to do with limitations of the information of legal authorities, and others of a different nature.

Before proceeding, let me remark on the relationship of the analysis here to literature on the appeals process. The present article is, to my knowledge, the first to



examine the optimal use of discretionary review and direct appeal in a general model of the appeals process employing the methods of economics, and to suggest that it may be advantageous to give litigants the right to choose between discretionary review and direct appeal.<sup>4</sup> This article, however, makes use of valuable informal observations from prior writing, especially that comparing or proposing discretionary review as an alternative to direct appeal, for example, Baker (1994a), Dalton (1985), Lay (1981), and Justice Rehnquist.<sup>5</sup> Also of relevance to this article are empirical findings about the appeals process, on which see especially research by Theodore Eisenberg and coauthors<sup>6</sup> and certain governmental sources.<sup>7</sup>

## **2. Basic Theory**

### 2.1 Assumptions

I set out here a stylized model of the appeals process in order to clarify the analysis of its design and functioning. I assume that there is a trial court and an appeals

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<sup>4</sup> A number of articles contain economically-oriented theoretical analyses of either direct appeal or of discretionary review (some focusing on error correction, others on different issues), but do not seek to compare direct appeal and discretionary review. See Cameron and Kornhauser (2005, 2006), Daughety and Reinganum (2000), Kornhauser (1995), Levy (2005), and Shavell (1995, 2006), dealing mainly with direct appeal; and see Daughety and Reinganum (2006) and Spitzer and Talley (2000), addressing mainly discretionary review.

<sup>5</sup> Justice William Rehnquist suggested replacing appeal as of right with discretionary review in the federal district courts in an address at the University of Florida College of Law; see Greenhouse (1984). See also Baker (1994b, pp. 234-238), Carlton (1997, pp. 4-5), Federal Courts Study Committee (1990, p. 124), Judicial Conference of the United States (1995, ch. 10), Lay (1989, pp. 532-33), Nagel (1994), and Parker and Chapman (1997).

<sup>6</sup> See Eisenberg (2004), Eisenberg and Heise (2008), and Eisenberg and Miller (2008).

<sup>7</sup> The Statistics Division of the Administrative Office of the United States Courts (hereafter AO) collects and publishes statistics on the federal courts; see <http://www.uscourts.gov/library/statisticalreports.html> (last visited 9/12/08). The Court Statistics Project of the National Center for State Courts does the same for state courts; see [http://www.ncsconline.org/D\\_Research/csp/CSP\\_Main\\_Page.html](http://www.ncsconline.org/D_Research/csp/CSP_Main_Page.html) (last visited 9/12/08). For statistics on the judicial systems of key civil law countries, see Ministère de la Justice (2007), Consejo General del Poder Judicial (2008), and Statistisches Bundesamt (2008a, b).

court. The appeals court can reconsider trial court decisions and has higher authority than the trial court. After a trial court outcome, three outcomes are in principle possible: the case decided by the trial court ends with no involvement of the appeals court; the case is heard by the appeals court in an appeals proceeding, which results either in an affirmance or a reversal of the trial court decision; or the case is given preliminary consideration by the appeals court in a discretionary review proceeding, which results either in a decision to end the case or to conduct an appeals proceeding.<sup>8</sup> This is portrayed in Figure 1.

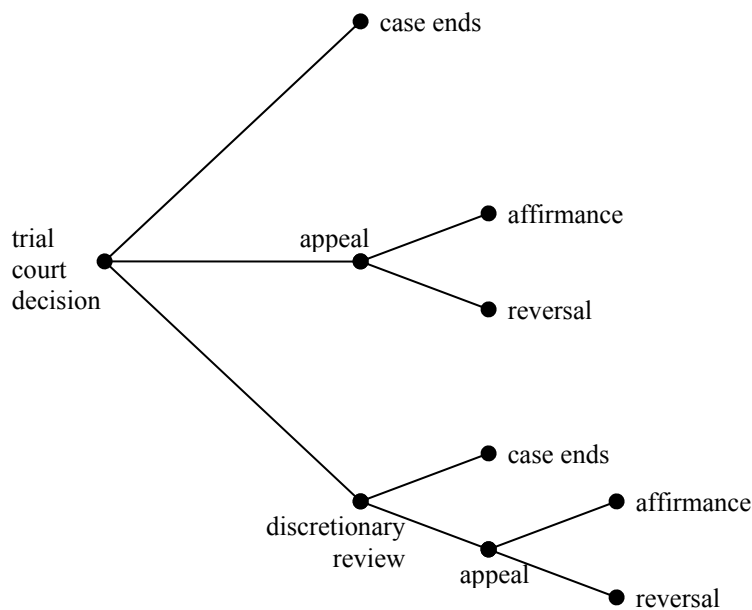


Figure 1. Possible Outcomes After a Trial Court Decision

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<sup>8</sup> In particular, if the appeals court decides to end the case, my assumption is that the case is truly over – the appellant cannot treat the adverse outcome of discretionary review merely as advisory and proceed to make a direct appeal.

I assume also that there is a trial court litigant who is disappointed with the trial court outcome and wishes it to be reversed. I call this party the appellant<sup>9</sup> and the opposing party the appellee. The appellant (together with counsel) formulates a probability that the trial court decision would be reversed in an appeal. If there is a discretionary review, the appeals court determines a refined probability of reversal, that is, a probability that is superior to the initial probability of the appellant. The motivation for the assumption that this probability is superior is that the appeals court is not only an expert body but is also predicting its own behavior.<sup>10</sup>

An appeals proceeding involves costs, comprised of the legal and other expenses (time and effort) of the appellant, similar expenses of the appellee, and the expenses of the appeals court itself. I refer to these costs collectively as the social costs of an appeal. Likewise, a discretionary review involves social costs, and I assume that they are less than the social costs of an appeal.

Additionally, I suppose that a reversal generates a social benefit, the motivation being that reversals tend to correct errors, induce better trial court decisions, develop new law, and the like. I also assume that affirmances do not generate social benefits, as they do not change trial court decisions.<sup>11</sup>

Finally, I adopt a simple measure of social welfare: the expected social benefits from reversals minus the social costs of the appeals process, including those of discretionary review. This measure of social welfare captures the notion that reversals

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<sup>9</sup> I use this term for simplicity even though “potential appellant” would sometimes be apt, for the disappointed litigant might decide not to appeal.

<sup>10</sup> I relax this assumption below, in sections 2.5 and 3.4, where I discuss the possibility that the appeals court might not obtain superior information when it undertakes a discretionary review.

<sup>11</sup> I discuss the effect of the assumption that affirmances may have social value in section 2.5.

tend to be socially good and that the costs of the appeals process represent a social detriment.

## 2.2 The Socially Ideal Appeals Process

Now let me describe the socially optimal appeals process, assuming that the parties behave so as to maximize social welfare. (In fact, of course, parties will behave so as to foster their own objectives rather than social welfare; their self-interested behavior is addressed in Section 2.3.)

Specifically, I will explain how socially best behavior – whether the appeals process should be employed, and if so, whether direct appeal or discretionary review should be used – depends on the level of the appellant’s initial probability of reversal, other things being equal. I claim that socially best behavior has the following general description: if the appellant’s probability of reversal is in a low range (is less than a first threshold probability), the appellant’s case should end without use of discretionary review or an appeal; if the probability of reversal is in a mid-range (exceeds the first threshold but is less than a second threshold), the case should be heard in a discretionary review; and if the probability of reversal is in a high range (exceeds the second threshold), the case should be directly considered in an appeal.<sup>12</sup> Because socially best behavior depends on the appellant’s probability assessment, it is the appellant who must decide on the course of action.

I will illustrate this claim with a numerical example; the formal demonstration of the claim is made in Section 3. In the example, I suppose that the social costs of an appeal are \$100,000 and that those of a discretionary review are \$20,000. The social

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<sup>12</sup> This characterization of the socially best use of appeals and discretionary review presumes that their costs are low enough to make each sometimes worth employing; for details, see Section 3.

value of a reversal is \$250,000. The appellant's initial prospect of success, that is of reversal, varies depending on the case and can be anywhere between 0% and 100%.

I further assume in the example that if there is a discretionary review, the appeals court will either determine that the chances of reversal are low – which I call “bad news” – or that the chances of reversal are high – which I call “good news.” In particular, let us say that bad news means the likelihood of reversal is only 10% and good news means that the likelihood of reversal is 90%.

It is important to observe that the initial prospect of reversal must be consistent with the likelihood of bad news and of good news in discretionary review, that is to say, must equal their expected value. For instance, if the initial likelihood of success is 15%, consistency requires that the probability-weighted average of bad news and of good news equals 15%. This will be true if the probability of bad news is 93.75% and that of good news is 6.25%, for then the expected probability will be  $93.75\% \times 10\% + 6.25\% \times 90\% = 15\%$ . Similarly, if the initial probability of success is 25%, then probability of bad news must be 81.25% and that of good news 18.75%, for  $81.25\% \times 10\% + 18.75\% \times 90\% = 25\%$ .<sup>13</sup>

Now let me explain why, if the appellant's initial probability of success is in a low region, it is best for the case to end. Consider an initial probability of 15%. Clearly,

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<sup>13</sup> The point being made is that the probability equals the mean of the probabilities conditional on what the appeals court learns. Algebraically, let  $q$  be the appellant's initial probability of reversal and  $p$  be the probability of bad news. We must then have that  $q = .1p + .9(1 - p)$ , since .1 is the probability of reversal given bad news and .9 is the probability of reversal given good news. This formula can be solved for  $p$  as a function of  $q$ :  $p = (.9 - q)/.8$ . Note that the formula can hold only for  $q$  in  $[.1, .9]$ . For  $q$  below .1 or above .9, there must be different probabilities conditional on bad news and good news. This matter need not detain us for purposes of the illustrations I make in the text. In Section 3, there is a specification of probabilities of reversal after discretionary review given any  $q$ .

direct appeal is not worthwhile, for the expected social benefit from appeal would be  $15\% \times \$250,000 = \$37,500$ , whereas the cost would be \$100,000.<sup>14</sup>

Is discretionary review worthwhile when the appellant's prospect of success is 15%? To answer this question, we must consider what would occur under the two possible outcomes of discretionary review, bad news and good news. If discretionary review would result in bad news, then it would not be worthwhile holding an appeal, for an appeal with a 10% chance of success has an expected value of  $10\% \times \$250,000 = \$25,000$ , which is less than its cost of \$100,000.<sup>15</sup> If discretionary review would result in good news, however, it would be worthwhile holding an appeal, for an appeal with a 90% chance of success has an expected value of  $90\% \times \$250,000 = \$225,000$ , which exceeds its cost of \$100,000, and thus involves a net gain of \$125,000. Now we can address the question whether discretionary review is worthwhile when the appellant's initial prospect of success is 15%. That means, recall, that the probability of bad news is 93.75% and the probability of good news is 6.25%. This in turn means that the expected payoff from discretionary review is  $6.25\% \times \$125,000$  or \$7,812.50. This is less than the \$20,000 cost of discretionary review, so discretionary review would not be worthwhile. In essence, the low initial probability of success implies a low likelihood of an appeal following discretionary review, and thus a low expected return from discretionary review.

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<sup>14</sup> This conclusion that direct appeal is socially undesirable obviously depends on the social value of a reversal. For instance, if the value of a reversal were \$1,000,000, then the expected benefit from appeal would be \$150,000, and direct appeal would be socially desirable. Although in discussing the example, I will not vary assumptions about the value of a reversal, this is done in the formal analysis. See for example (3), giving the formula for the probability above which direct appeal would be socially desirable.

<sup>15</sup> This is not to say that the appeals court would announce to the world that it heard bad news or its assessment of the probability of a reversal. The court might merely announce its decision, or if it justified its decision, it might well not make direct reference to the probability of success on full appeal.

If, however, the initial likelihood of success exceeds a threshold, which here turns out to be 23%, then discretionary review will be desirable.<sup>16</sup> For instance, suppose that the likelihood of reversal is 30%. This implies that the probability of bad news is 75% and the probability of good news is 25%.<sup>17</sup> Hence, the expected value of discretionary review is  $25\% \times \$125,000$  or \$31,250, which exceeds its cost of \$20,000, so discretionary review would be worthwhile. Direct appeal, however, would not be worthwhile, because  $30\% \times \$250,000 = \$75,000$ , whereas its cost is \$100,000.

Discretionary review may be desirable not only when the initial likelihood of success is not high enough to make direct appeal worthwhile, as we just saw was true when the initial likelihood was 30%, but also when the initial likelihood is high enough to make direct appeal better than ending the case. Suppose, for instance, that the initial probability of success is 50%. Then direct appeal would be worthwhile bringing were it the only option, for it would yield a return of  $50\% \times \$250,000 = \$125,000$  at a cost of \$100,000, so involve a net benefit of \$25,000. Discretionary review would be better than direct appeal, however. To see this, note that a 50% probability of success implies that the probabilities of bad news and of good news are each 50%.<sup>18</sup> Hence, the expected value of discretionary review is  $50\% \times \$125,000 = \$62,500$ , so that its net value is  $\$62,500 - \$20,000 = \$42,500$ . Because the net value of discretionary review of \$42,500 exceeds that of appeal, \$25,000, discretionary review is superior. The underlying

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<sup>16</sup> This threshold is found by asking at what initial probability  $q$  of reversal does the expected value of discretionary review just equal its cost, \$20,000? The expected value of reversal under discretionary review is in general  $(1 - p)(\$125,000) = [(q - .1)/.8](\$125,000)$ . Solving  $[(q - .1)/.8](\$125,000) = \$20,000$  yields  $q = .228$ .

<sup>17</sup> From note 13,  $p = (.9 - q)/.8$ , and here  $q$  is .3. Hence,  $p = .6/.8 = .75$ . Observe too that  $.75 \times .1 + .25 \times .9 = .3$ .

<sup>18</sup> From the formula  $p = (.9 - q)/.8$  and  $q = .5$ , we obtain  $p = .4/.8 = .5$ .

advantage of discretionary review over direct appeal is that under discretionary review, society avoids an expenditure of \$100,000 on an appeal whenever bad news is heard.

Direct appeal becomes superior to discretionary review if the initial prospect of success exceeds a second threshold, which in this example is 69%.<sup>19</sup> For example, if the initial probability of reversal is 80%, then appeal would yield a net benefit of  $80\% \times \$250,000 - \$100,000 = \$100,000$ . Because an 80% probability of reversal implies that the likelihood of good news is 87.5%,<sup>20</sup> the net value of discretionary review is  $87.5\% \times \$125,000 - \$20,000 = \$89,375$ , which is lower. The reason is that, because discretionary review is so likely to result in a decision to appeal, the expenditure of \$20,000 on discretionary review is likely to be a waste.

To summarize this example, if the initial probability of reversal is between 0% and 23%, it is best for the case to terminate; if the probability is between 23% and 69%, it is best for discretionary review to be employed; and if the probability exceeds 69%, it is

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<sup>19</sup> To determine the threshold, we want the probability  $q$  at which the value of appeal is just equal to the value of discretionary review. The value of appeal is  $\$250,000q - \$100,000$ . The value of discretionary review is  $[(q - .1)/.8]\$125,000 - \$20,000$ . Setting these expressions equal to each other and solving for  $q$ , we obtain 68.67%.

<sup>20</sup> From  $p = (.9 - q)/.8$  and  $q = .8$ , we obtain  $p = .1/.8 = .125$ .



best for a direct appeal to be made. This is portrayed in Figure 2.

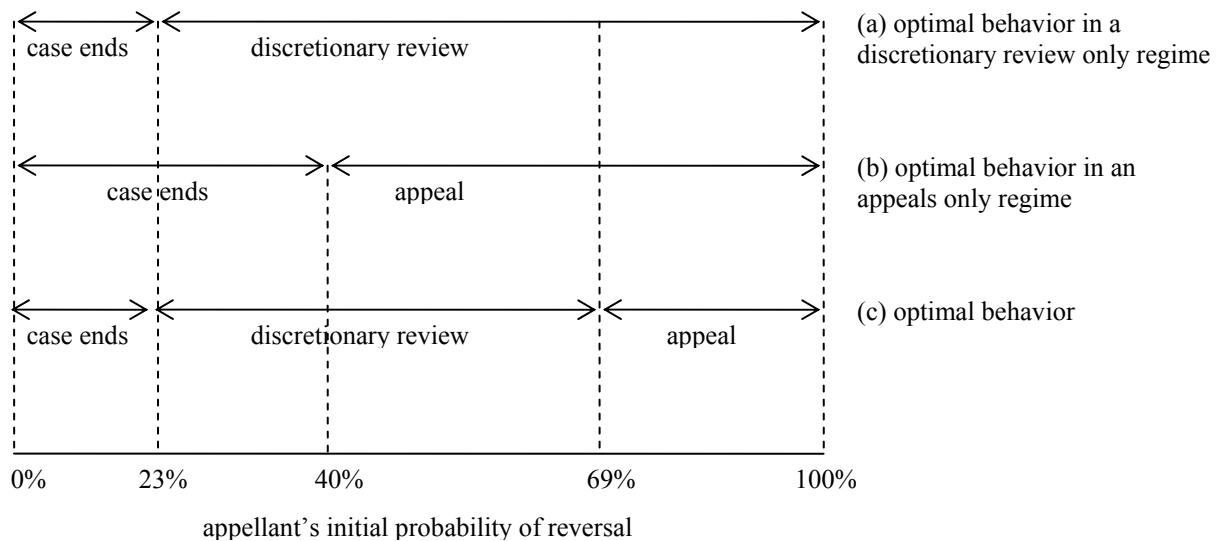


Figure 2. The Optimal Resolution of Cases

It is useful to contrast the outcomes in this example under the optimal appeals regime and the outcomes under a regime of appeals only. Under a regime of appeals only, appeals are desirable to make only when their expected value exceeds their cost of \$100,000. In other words, if  $p$  is the probability of reversal, appeals are desirable if and only if  $p \times \$250,000$  exceeds \$100,000. Hence, appeals are desirable if and only if the likelihood of reversal exceeds 40%. This is shown in line (b) of Figure 2. There are then two differences in outcome from the socially best situation, displayed in line (c) of Figure 2. First, cases in which the chances of reversal are between 23% and 40% are not appealed, whereas these cases would have been desirable to hear in discretionary review – and then some of them would have gone on to be appealed because they would have been discovered to be likely to be meritorious in discretionary review. Thus, one loss from not having discretionary review available is that cases that should have been heard in discretionary review will be terminated. The measure of this loss is the expected value

of discretionary review. For instance, if the chance of reversal is 30%, the expected value of discretionary review I calculated to be  $\$31,250 - \$20,000 = \$11,250$ , so this amount is lost when discretionary review is unavailable. Second, cases in which the chances of reversal are between 40% and 69% are appealed, whereas it would have been better to have them heard in a discretionary review proceeding. The social loss from not having discretionary review for such cases is that, on hearing bad news, cases cannot be dropped and the cost of a full appeal cannot be saved. For instance, I showed that if discretionary review is employed when the prospect of success is 50%, the net value of discretionary review is \$42,500, whereas if appeal is made, its net value is \$25,000; hence, there is a loss of \$17,500 from having to use appeal due to forgoing the savings from avoiding the expense of an appeal when the news from discretionary review is bad.

Now consider the difference in outcomes between the optimal regime and a regime of discretionary review only. Here, as is displayed in line (a) of Figure 2, the problem is that, for cases for which the initial chance of success exceeds 69%, there will be discretionary review, whereas in the optimal system there would be direct appeal. For example, when the chance of success is 80%, I observed that under discretionary review the net value is \$89,375, whereas it is \$100,000 under appeal, so appeal is better by \$10,675. The reason for the advantage of appeal, recall, is that there is a high probability that discretionary review will constitute a sterile effort because it is likely to result in a decision to proceed to appeal.

### 2.3 The Appeals Process Given Parties' Self-Interested Incentives

I have discussed in the preceding section the socially best design of the appeals system, assuming that the choices of appellants and of the appeals courts about whether

to take a case on appeal are socially desirable. But the motivations of litigants and of appeals courts may not be aligned with society's. Let me now discuss these issues.

*Appellants' incentives.* One factor that is relevant to appellants' incentives is that they do not bear the full social cost of adjudication – they bear their own costs but not the expenses of opposing appellees or those of the appeals courts.<sup>21</sup>

That an appellant does not bear the full social cost of an appeal implies that there will be a socially excessive incentive to bring an appeal, other things being equal. In our example, suppose that the cost of an appeal to the appellant is \$40,000, that the cost to the appellee is \$30,000, and that the cost to the court is \$30,000, so that the full social costs are \$100,000 (as I had assumed was the total). Then the appellant would find bringing an appeal worthwhile whenever the probability of reversal exceeds 16%, as  $16\% \times \$250,000 = \$40,000$ , whereas it is socially desirable to bring an appeal only when the probability exceeds 40%, as  $40\% \times \$250,000 = \$100,000$ .

That an appellant does not bear the full social cost of discretionary review has a somewhat complicated effect on the appellant's incentives to choose discretionary review. Suppose first that, in the absence of discretionary review, the appellant would not bring an appeal (in other words, that the appellant's initial probability of reversal is less than 16%). Then there would tend to be a socially excessive incentive to choose discretionary review. This is so not only because the appellant's cost of discretionary review is less than the social cost, but also because the appellant's value of discretionary

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<sup>21</sup> Except to the extent that they might have to pay a fee for the making of an appeal, a factor that I will for the present assume is absent. On such fees, which tend to be nominal, see Section 5.2.

review may be socially excessive.<sup>22</sup> However, suppose next that, in the absence of discretionary review, the appellant would bring an appeal. Then it is not clear whether discretionary review would be chosen too often. The reason is that the value to the appellant of discretionary review over appeal is less than society's value, for the value resides in the appellant's savings from avoiding an appeal that is unlikely to succeed, and these savings are less than the social savings (just because the appellant's cost of an appeal is less than the social costs).

A second factor that can cause the appellant's incentives to differ from society's concerns the value of a reversal. An appellant might place a lower value on a reversal than society because a reversal would clarify the law, set a new precedent, or induce trial court judges to improve their decisionmaking – and thus benefit future actors but ordinarily not the appellant. Or an appellant might attach a greater value to a reversal than society, for instance, when a reversal would yield the appellant significant damages but would not be much noticed by other parties and exert negligible effect on their future behavior.

That an appellant's evaluation of a reversal may diverge from society's has clear implications for the incentive to bring an appeal. To the degree that an appellant's value of a reversal is less than society's, the appellant would have an inadequate incentive to bring appeals – therefore counteracting the excessive incentive due to private-social cost disparity. Conversely, to the extent that an appellant's value of a reversal exceeds society's, the appellant would have an excessive incentive to bring an appeal – thus

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<sup>22</sup> The reason that the private value of discretionary review may be socially excessive is that its value (when a direct appeal would not be brought) inheres in obtaining good news and deciding to go ahead to appeal. When the appellant goes ahead to appeal, he may derive a socially excessive benefit because his cost of appeal is less than the social cost.

exacerbating the excessive incentive to bring appeals due to the private-social cost difference.

The influence of a divergence between the appellant's value of a reversal and society's on the incentive to choose discretionary review depends on whether, if discretionary review is not chosen, appeal would be chosen. Suppose that, in the absence of discretionary review, there would not be an appeal. Then if the appellant's value of a reversal is less than the society's, so too would tend to be the value of discretionary review (and conversely if the appellant's value of a reversal exceeds the social value). Suppose, though, that in the absence of discretionary review, there would be an appeal. Then if the appellant's value of a reversal is less than the social, the value of discretionary review might exceed the social value.<sup>23</sup>

*Appeals court's incentives.* If the appeals court engages in discretionary review, it ought to proceed to an appeal if and only if the expected benefit from doing so exceeds the social cost of an appeal. In our example, this meant that an appeal ought to be undertaken when there is good news, for the expected benefit would then be  $90\% \times 250,000 = \$225,000$ , exceeding its social cost of \$100,000, but not when there is bad news, for then the expected benefit would only be  $10\% \times 250,000 = \$25,000$ . However, the appeals court's incentives to take a case after discretionary review may deviate from what is socially best. If, for example, the appeals court puts too much weight on its own time and resources, it might turn down too many appeals. And if its valuation of reversals differs from society's, this also would lead to distorted decisions.

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<sup>23</sup> The logic is that the value of discretionary review over appeal resides in the net savings obtained when appeal is not pursued. This net savings is the cost of appeal minus the expected value of reversal. Because the appellant's expected value of reversal is lower than society's, the appellant's net savings might be greater than society's.

## 2.4 Social Policy In Light of Incentive Problems

Now that I have discussed the differences between socially ideal behavior of parties and their actual behavior given their own incentives, two questions naturally arise. First, does it remain socially advantageous for appellants to be able to choose between discretionary review and direct appeal? Second, is there some way of attenuating the incentive problems? I address these questions in turn.

*The optimal appeals regime given the presence of incentive problems.* The presence of incentive problems could alter the conclusion that it is desirable for appellants to be able to choose between discretionary review and appeal.<sup>24</sup> But the circumstances under which that would be so are somewhat special. Their nature can be understood from a consideration of why a regime under which just one avenue of appeal is available – just direct appeal, or just discretionary review – might be superior to a regime of choice.

Consider first the regime under which direct appeal alone is available. Let us ask how it could be that this regime would be superior to the regime in which discretionary review is also available. In the joint regime, there would be two differences in behavior: some appellants would choose discretionary review instead of direct appeal; and some appellants would choose discretionary review instead of doing nothing. One or both of these two differences in outcome would have to be socially undesirable for the regime of appeals only to be best.

What would make a switch from direct appeal to discretionary review socially undesirable, even though the appellant prefers the latter? One possible reason is that the

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<sup>24</sup> In Section 3, I show that it is possible that a regime of appeals only might be best and also that a regime of discretionary review only might be best.

private-cost bias, that appellants only bear a part of the social cost of adjudication, would be more pronounced with regard to discretionary review, and so would lead to switching from appeal to discretionary review even though that is socially disadvantageous. This outcome, though, seems unlikely. On one hand, I see no basis for believing that the difference between the appellant's cost and the social cost would be larger for discretionary review than for full appeal; to the contrary, I suspect the opposite would usually be true because full appeal is a more serious process and involves a greater commitment of resources by the appellee and the appeals court. On the other hand, even if it were true that the private-cost bias is such that some changes to discretionary review would be socially unwanted, it seems probable that most changes to discretionary review would be socially good, as they would save the costs of full appeal.

A second possible reason that a switch from direct appeal to discretionary review would be socially undesirable is that discretionary review might result in systematic, socially undesirable denial of appeals. For this to be true, however, appellants would have to choose discretionary review despite the presumed tendency of appeals courts not to take cases for appeal. That seems improbable.

Let us now turn to the question, what would make a switch from doing nothing to engaging in discretionary appeal socially undesirable? It would have to be that discretionary appeal is socially undesirable even though it is chosen by appellants. This possibility does not seem implausible; it could arise either due to the private-cost bias, making discretionary review and appeal less expensive to appellants than it is socially, or to appellants' valuing reversal more highly than does society.

In sum, it is an empirical question whether, and the extent to which, the two effects of allowing appellants to choose discretionary review in addition to appeal – that they might switch from appeal to discretionary review, and that they might choose discretionary review rather than doing nothing – are socially undesirable. But reflection on the circumstances that would have to hold for these changes to be undesirable lead me to believe that they would often be desirable, and that, especially, switches from appeal to discretionary review are likely to be socially desirable. Overall, then, I suggest that the benchmark for thinking about addition of the option of discretionary review to the right of appeal is that this policy would be socially desirable.

Next let us consider a regime in which discretionary review alone is available and ask how it could be that this regime would be superior to the joint regime in which appeal is also available. In the joint regime, there would again be two differences in behavior: some appellants would choose appeal instead of discretionary review; and some would choose appeal instead of doing nothing. One or both of these two differences in outcome would have to be socially undesirable for the regime of discretionary review alone to be best. Let us proceed analogously to before and inquire why each of these differences might be socially undesirable.

Under what conditions would a switch from discretionary review to appeal be socially undesirable? One circumstance is that the private-cost bias is more significant with regard to appeal and makes appeal relatively more attractive to appellants than is socially best. A second circumstance is that appellants place a greater value on reversal than is socially best, so want appeal more often than appeals courts would grant it. These two circumstances also would explain why a switch by appellants from doing



nothing to full appeal would be socially undesirable. Neither of these circumstances seems unlikely. Hence, I can more readily imagine that incentive problems would lead to the conclusion that a regime of discretionary review alone is best than that a regime of appeal alone is best.

In any event, my conclusion is this. There are a variety of distortions that make behavior different from the socially optimal and that can cause a regime in which there is a single appeals procedure to be superior to the joint regime in which both discretionary review and appeal are available. But the point of departure for evaluation of regimes should be that a joint regime is best, especially in comparison to a regime of direct appeals only.

*Attenuation of incentive problems.* Last, let me consider the issue of how in theory to improve the incentives of parties. Use of corrective policies would not only make the behavior of parties socially better, it would also make it more likely that the regime in which there is a choice between discretionary review and appeal would be best to employ.

The problem that the cost of appeal, or of discretionary review, is too low could be corrected by requiring appellants to pay a fee for each equal to the sum of the appellee's costs and of the court's costs.

To correct the problem caused by differences between the private and the social values of reversal, rewards or sanctions based on the occurrence of reversals could be employed. In particular, if the private value of a reversal is less than the social value, the appellant could be given a reward equal to the difference (for example, if the private value of a reversal is \$100,000 and the social value is \$150,000, the appellant could be

given a \$50,000 reward for a reversal); and if the private value of a reversal exceeds the social value, the appellant could be required to pay a tax equal to the difference if a reversal occurred. In this way, the private and social values of a reversal would be brought into alignment.

Analogous corrective policies could in principle be employed with respect to the appeals courts themselves if their incentives were distorted.

Having said what policies could alleviate in behavior of appellants and, possibly, appeals courts, one must note that the policies may be difficult to implement. In order to employ the policies to improve appellant behavior, the state would have to possess information about legal and judicial costs as well as information about differences between private and social values of reversal. Especially the latter information might be difficult to obtain. With regard to appeals courts, the informational difficulties would be similar. In addition to these problems of implementation are difficulties going outside the considerations of an economic model. Notably, the view that individuals should as a matter of fairness have access to the appeals process conflicts with the imposition of significant fees for its use, and the view that the judiciary is objective conflicts with the use of policies that would be seen as designed to alter otherwise imperfect motivations of appeals courts.

## 2.5 Modifications of the Model

I here consider briefly several issues that I had not taken into account in the analysis that could affect the character of the conclusions.

*The possibility that expenditures on discretionary review reduce the cost of a subsequent appeal.* I assumed for simplicity that the cost of an appeal does not depend

on whether a discretionary review occurred. The occurrence of a discretionary review, however, should usually lower the cost of an appeal, for many of the tasks that an appeals court performs in a discretionary review it would otherwise have to undertake in an appeal, so its work in an appeal should be reduced if has already engaged in a discretionary review.

To the degree that discretionary review lowers the cost of a subsequent appeal, the social value of discretionary review relative to appeal increases. In particular, the region of initial appellant probabilities of success over which discretionary review is desirable increases. In our example, suppose that three quarters of the expense of discretionary review represents work that would not have to be done during appeal. In other words, if there is a discretionary review, although the cost will be \$20,000, the cost of a subsequent appeal will fall by \$15,000 to \$85,000. Then the range of probabilities over which discretionary review is desirable will become 21% to 83% (before, recall, it was from 23% to 69%).<sup>25</sup>

Indeed, it is worth noting that if all the tasks in discretionary review are ones that would be undertaken in a full appeal – if the costs of discretionary review lower the costs of an appeal dollar for dollar – then discretionary review would *always* be superior to appeal. The reason is that if discretionary review results in bad news, it saves resources relative to an appeal, for an appeal is not pursued; and if discretionary review results in

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<sup>25</sup> The threshold at which discretionary review first becomes desirable is determined as follows. If discretionary review occurs, then the cost of an appeal will be \$85,000. Hence, if good news occurs and an appeal is undertaken, its expected value will be  $90\% \times \$250,000 - \$85,000 = \$140,000$ . Thus, the threshold probability is found by solving (see note 16)  $[(q - .1)/.8](\$140,000) = \$20,000$ , which yields  $q = .214$ . The other threshold is determined (see note 19) by  $\$250,000q - \$100,000 = [(q - .1)/.8]\$140,000 - \$20,000$ . Solving this for  $q$  gives .833.

good news, it involves no wasted expenditures, because all the expenditures on discretionary review are expenditures that reduce the cost of the appeal.

*The possibility that expenditures on appeal may be guided by what is learned from discretionary review.* Another relationship between discretionary review and expenditures on appeal is that what is learned from discretionary review may affect the nature and magnitude of expenditures on the appeal. If it becomes clear from a discretionary review that a particular issue will be important to the consideration of an appeal, greater expenditures can be directed toward that issue, and conversely, if it is seen that an issue turns out not to be of much significance to the appeal, lesser expenditures can be devoted to that issue. Such modifications in expenditures are socially desirable, as they are better focused on the issues of concern to the appeals court, and they cannot be made if the decision on expenditures on appeal have to be decided without the benefit of the learning from the outcome of a discretionary review.

*The possibility that a request for discretionary review would signal to the court that the appellant was uncertain about success.* I did not take into account in the analysis that appeals courts can rationally infer that appellants who elect discretionary review believe their cases to be less likely to succeed than the threshold above which direct appeal is best (that is, less 69% in the example). How would recognition of this negative inference alter the analysis?

One possibility is that the negative inference would have no influence. Suppose that the information (say about a mistaken interpretation of a precedent) upon which the appellant based his or her estimate of success is communicated to the appeals court in its discretionary review. Then the appeals court's negative inference from the fact that

discretionary review was elected would be moot. Its initial negative inference would merely be validated by what it would learn in its discretionary review (it would learn that the argument about the mistaken interpretation of a precedent was weak).

Suppose, on the other hand, that some of the information upon which the appellant based his or her estimate of reversal could not be presented to the appeals court in its discretionary review (due to constraints such as on the length of briefs – see two paragraphs below). Then the negative inference made by the appeals court from the fact that the appellant chose discretionary review would not be moot, for it would not necessarily be validated by the discretionary review. Somewhat surprisingly, however, this phenomenon might not discourage use of discretionary review. The reason is that appellants should in principle (in the absence of a divergence between private and social costs or benefits) *desire* appeals courts to decide whether to go forward and grant appeals using the best possible prediction of success. Hence, if, using its rational inference, the appeals court would decide that an appeal would not be worthwhile, the appellant would should want that to be the outcome. Notwithstanding this point, if the negative signaling effect of having brought discretionary review would undesirably discourage the use of discretionary review, that could be countered by a lowering of the fee for discretionary review or by allowing greater presentation of evidence in the discretionary review.

*The problem of excessive appeal due to attorney self-interest is mitigated under discretionary review.* Attorneys have a personal interest in making appeals, as that means more work for them, suggesting that to some degree attorneys will give unduly optimistic advice to clients and promote excessive appeals if direct appeal is the only avenue of appeal. If, however, a client may elect discretionary review instead of appeal,

the client can ameliorate the foregoing attorney-agency problem, for under discretionary review, he or she will not have to rely on the attorney's advice whether to invest in an appeal; the client can instead benefit from the appeals court's evaluation of the merit of a case.

*The possibility that the assessment of an appeal under discretionary review is not superior to the assessment of the appellant.* I assumed that discretionary review yields an assessment by the appeals court of the outcome of an appeal that is superior to the initial assessment of the appellant. That assumption was attractive, because it reflects the view that the appeals court has general expertise about appeals and also that it is predicting its own behavior. Nevertheless, an appellant could have a better assessment of the outcome of an appeal than would the appeals court from a discretionary review if the appellant possesses information that would not be heard in a discretionary review but would be considered in an appeal. For example, an appellant might have a legal argument that the appellant believes would be persuasive to the appeals court, but which the appellant would not have the opportunity to develop at the stage of discretionary review.

Such a possibility could be taken into account by expanding the model to allow explicitly for information that the appellant possesses that would not be presented at a discretionary review but would be at an appeal.<sup>26</sup> In this more general model, the social desirability of discretionary review would be lower, but the main qualitative conclusion of the article – that it is best for appellants to make the choice between discretionary review and direct appeal would continue to hold.

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<sup>26</sup> Obviously, information that would not be presented at appeal is irrelevant.

*The possibility of settlement.* I did not take into account the possibility of settlement of appeals in the analysis, and it is evident that the existence of a discretionary review can promote settlement of cases.<sup>27</sup> If discretionary review results in a full appeal, uncertainty concerning the outcome of the appeal will thereby be reduced, which should lead to more frequent settlement.<sup>28</sup> This constitutes an argument favoring discretionary review, assuming that settlement is socially desirable.<sup>29</sup>

*The possibility that affirmances have positive social value.* I assumed in the analysis that an affirmance would have no value to an appellant, which is a natural assumption, as an affirmance would not change the outcome for the appellant. From a social perspective, however, an affirmance might have value, notably because it could contribute to clarification or development of the law. To the degree that affirmances have social value, appellant behavior will tend to be distorted from socially ideal behavior in two ways. First, appellant incentives to have their cases considered by the appeals courts might be too low – why bring an appeal if one believes the likelihood of reversal is scant? Second, appellant incentives to choose discretionary review rather than appeal might be too low.<sup>30</sup>

## 2.6 Conclusion

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<sup>27</sup> In a recent paper, Miller (2008) emphasizes a point related to that of this paragraph. He discusses how settlement would be promoted by a trial procedure that he proposes – a preliminary judgment that trial courts might issue.

<sup>28</sup> That is, sources of asymmetric information will be eliminated, such as signals that give the litigants a different opinion about a particular legal issue that the appeals court resolves in its discretionary review. See Bebchuk (1984) and, for surveys, Shavell (2004, ch. 17) and Spier (2007).

<sup>29</sup> On the social desirability of settlement, see Shavell (2004, pp. 411-415) and Spier (2007, pp. 280-282).

<sup>30</sup> An appellant might want to bring an appeal because of the value of a reversal. The appellant might not want to ask for discretionary review because the appeals court might be motivated mainly by the desire to take cases that will be affirmed, in order to clarify the law.

To summarize the conclusions from the model, the ideal design of the appeals process would allow appellants the right to choose between discretionary review and direct appeal – neither a system of appeal alone nor of mandatory discretionary review would be desirable. This conclusion depended on the assumption that appellants and the appeals court have motivations that are aligned with society’s, whereas there are reasons to believe that they may not, notably that appellants do not bear the full social costs of appeals and that the value they place on a reversal may diverge from the social value of a reversal. Although these factors lead to deviations from optimal behavior, the conclusion that it is best for appellants to be able to choose between discretionary review and appeal should remain a benchmark for thinking. There are, at least in principle, ways of correcting the distortions of behavior, using fees and money payments based on legal outcomes, but these face informational and other hurdles.

### **3. Formal Analysis**

#### 3.1 Assumptions and framework of analysis

I make assumptions that are essentially as discussed in the prior section: There is a trial court that has rendered a decision against a litigant and a superior court called the appeals court. The appeals court can reexamine the trial court outcome in an appeal, but such a proceeding involves costs for both the disappointed litigant, called the appellant, and the appeals court.<sup>31</sup> Let

$\beta_l$  = cost to an appellant of an appeal;  $\beta_l > 0$ ; and

$\beta_c$  = cost to the appeals court of an appeal;  $\beta_c > 0$ .

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<sup>31</sup> In the informal analysis and in reality, the costs include those of the appellee as well, but in the formal analysis I simplify by excluding consideration of the appellee (or we could interpret  $\beta_c$  to include the appellee’s costs, and similarly for  $\alpha_c$  to be defined).



The appeals court can also engage in a preliminary discretionary review of the trial court outcome, which will also involve costs. After a discretionary review, the appeals court decides whether or not to hold an appeal. Let

$\alpha_l$  = cost to an appellant of a discretionary review;  $\alpha_l > 0$ ;

$\alpha_c$  = cost to the appeals court of a discretionary review;  $\alpha_c > 0$ .

If there is an appeals court consideration of a case, the appeals court will either affirm the trial court decision or it will reverse the decision. The appellant formulates an initial probability that the appeals court would reverse. Let

$q$  = appellant's prior probability of a reversal;  $q$  in  $[0, 1]$ ; and

$f(q)$  = probability density of  $q$ ;  $f(q)$  is positive on  $[0, 1]$ .

In the absence of a discretionary review of a case, the appeals court does not know  $q$ ; it knows only the distribution  $f$ . If, however, the appeals court engages in a discretionary review, its information about reversal will be based on superior information to the appellant's (in part, because the appeals court is predicting its own behavior), and it will formulate a refined probability of reversal.<sup>32</sup> Let

$p$  = probability of reversal after discretionary review;  $p$  in  $[0, 1]$ ; and

$h(p|q)$  = probability density of  $p$  on  $[0, 1]$  given  $q$  in  $(0, 1)$ ,

where  $h$  is positive and continuous in  $p$  and  $q$  for  $p$  in  $[0, 1]$  for any  $q$  in  $(0, 1)$ , and where the  $H(\cdot|q)$  converge in distribution to  $H(\cdot|q_0)$  as  $q \rightarrow q_0$  for any  $q_0$  in  $[0, 1]$ . (Here  $H(\cdot|q)$  is the cumulative probability distribution function of  $p$  given  $q$ .)

We know that

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<sup>32</sup> In an extension of the basic model (see section 3.4), I consider explicitly the information available to the litigant and to the appeals court, and how each determines the probability of reversal.

$$(1) \quad q = \int_0^1 ph(p|q)dp,$$

for  $q$  in  $(0, 1)$ . That is, the expected value of the refined probability  $p$  that would result from discretionary review must be the prior probability  $q$ . Note also that if  $q = 0$ ,  $p$  must be 0, and if  $q = 1$ ,  $p$  must be 1.

Suppose that as  $q$  rises, the probability that  $p$  is above any given level increases: For any  $y$  in  $(0, 1)$ , the probability  $(1 - H(y|q))$  is increasing in  $q$  or, equivalently,  $H(y|q)$  is decreasing in  $q$ . In other words, if  $q_2 > q_1$ , then the random variable  $p|q_2$  stochastically dominates the random variable  $p|q_1$ .<sup>33</sup>

Suppose that a reversal of a trial court decision leads to a social gain. This assumption is motivated by the presumption that appeals courts have an ability to detect errors in legal decisions (because they can focus on asserted problems and may be comprised of multiple judges with superior skill and experience). Let

$$g_s = \text{expected social gain due to a reversal}; g_s > 0,$$

and assume that an affirmance has no social value.

Social welfare is presumed to be the expected gain from reversals minus expected adjudication costs. Last, suppose that

$$(2) \quad \beta_l + \beta_c < g_s,$$

meaning that an appeal will be socially worthwhile to hold when it is certain to succeed.<sup>34</sup>

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<sup>33</sup> This assumption of stochastic dominance will be used only to show that the value of discretionary review is monotonically increasing below a critical  $q$  and monotonically decreasing above that threshold; the qualitative results reported in Proposition 1 do not depend on the assumption.

<sup>34</sup> The conclusions for the case in which appeal will not be made even when it is certain to succeed will be obvious.

### 3.2 Socially Optimal Behavior

Consider first the socially optimal behavior of the appeals court assuming that it engages in discretionary review. The appeals court should then undertake an appeal when<sup>35</sup>

$$(3) \quad pg_s \geq \beta_l + \beta_c, \text{ or when } p \geq (\beta_l + \beta_c)/g_s = t^*.$$

Thus  $t^*$  denotes the critical threshold probability above which it is desirable that an appeal be heard. Note that  $0 < t^* < 1$ .

Next consider the expected value of discretionary review (gross of its costs,  $\alpha_l + \alpha_c$ ) as a function of the appellant's prior probability of reversal  $q$ . This value is given by

$$D(0) = 0$$

$$(4) \quad D(q) = \int_{t^*}^1 [pg_s - (\beta_l + \beta_c)]h(p|q)dp \text{ for } q \text{ in } (0, 1)$$

$$D(1) = g_s - (\beta_l + \beta_c).$$

In particular, when  $q = 0$ ,  $p$  will definitely be 0, so no appeal will take place and hence  $D(0) = 0$ . For  $q$  in  $(0, 1)$ ,  $p$  is continuously distributed on  $[0, 1]$ , and because an appeal will go forward if and only if  $p \geq t^*$ , the second expression gives the expected value of discretionary review. When  $q = 1$ ,  $p$  will definitely be 1, so an appeal will take place and therefore  $D(1) = g_s - (\beta_l + \beta_c)$ . Given the assumptions,  $D(q)$  must be continuous in  $q$  on  $[0, 1]$ .<sup>36</sup> Also,  $D(q)$  is lowest at  $q = 0$ , is positive for  $q > 0$ , and reaches its maximum at  $q$

<sup>35</sup> When (3) holds with equality, it does not matter whether an appeal is made, but for expositional ease I adopt the convention that it ought to be made, and I adopt similar conventions below without further comment.

<sup>36</sup> It is obvious that  $D(q)$  is continuous for  $q$  in  $(0, 1)$ . That  $D(q)$  is continuous at 0 and 1 follows from the Helly-Bray Theorem; see, for example, Rao (1965, p. 97).

= 1. The assumption of first-order stochastic dominance implies that  $D(q)$  is monotonically increasing in  $q$ .<sup>37</sup>

If discretionary review does not occur, an appeal should be undertaken when

$$(5) \quad qg_s \geq \beta_l + \beta_c, \text{ or when } q \geq t^*.$$

We can now state the value of discretionary review over the best alternative – either no appeal or appeal. If  $q < t^*$ , then, by (5) there should be no appeal in the absence of discretionary review. Hence, for such  $q$ , the value of discretionary review over the best alternative is  $D(q)$ , which is monotonically increasing in  $q$ . For such  $q$ , discretionary review is desirable if and only if  $D(q) > \alpha_l + \alpha_c$ .

If  $q \geq t^*$ , then appeal is desirable in the absence of discretionary review, in which case social welfare will be  $qg_s - (\beta_l + \beta_c)$ . Therefore, for such  $q$ , the value of

$$(6) \quad D(q) - [qg_s - (\beta_l + \beta_c)] = \int_{t^*}^1 [pg_s - (\beta_l + \beta_c)]h(p|q)dp$$

$$- \int_0^1 [pg_s - (\beta_l + \beta_c)]h(p|q)dp = \int_0^{t^*} [(\beta_l + \beta_c) - pg_s]h(p|q)dp,$$

which is the expected net savings from not engaging in appeal when it turns out that  $p$  is below  $t^*$ . Hence, for  $q \geq t^*$ , discretionary review is desirable if and only if (6) exceeds  $\alpha_l + \alpha_c$ . The assumption of stochastic dominance implies that (6) is monotonically decreasing in  $q$ .<sup>38</sup> Note that at  $q = 1$ , (6) reduces to

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<sup>37</sup> Consider  $q_2 > q_1$ . We want to show that  $D(q_2) > D(q_1)$ . Define  $G(p) = H(p|q_2) - H(p|q_1)$ , and note that  $G(p) < 0$  for  $p$  in  $(0, 1)$  because of stochastic dominance. Integration by parts gives us:

$$\int_{t^*}^1 [pg_s - (\beta_l + \beta_c)]dG(p)dp = \{ [pg_s - (\beta_l + \beta_c)]G(p) \}_{t^*}^1 - \int_{t^*}^1 g_s G(p)dp.$$

The first term on the right equals  $-[t^*g_s - (\beta_l + \beta_c)]G(t^*)$  since  $G(1) = 0$ , and  $[t^*g_s - (\beta_l + \beta_c)] = 0$  by the definition of  $t^*$ . Hence the right-hand side reduces to the second term, which is positive since  $G(p) < 0$ . Hence the right side is positive, which means that  $D(q_2) > D(q_1)$ .

<sup>38</sup> The proof is essentially the same as that in the previous note.

$$(7) \quad D(1) - [g_s - (\beta_l + \beta_c)] = 0,$$

so that discretionary review is definitely undesirable (there is no possibility of savings from not engaging in appeal when it is known that  $p$  will be 1).

Given what has been shown, we can now characterize optimal behavior as a function of the prior probability  $q$ . In particular, we know that the value of discretionary review relative to the best alternative is monotonically increasing for  $q$  below  $t^*$  and monotonically decreasing for  $q$  at least  $t^*$ . Hence, we know that discretionary review is desirable for some  $q$  if and only if it is desirable at  $t^*$ . That is, if and only if

$$(8) \quad D(t^*) = \int_{t^*}^1 [pg_s - (\beta_l + \beta_c)]h(p|t^*)dp > \alpha_l + \alpha_c,$$

are there  $q$  for which discretionary review is desirable. We furthermore know that when (8) holds, there is a positive interval  $(a, b)$ , in which discretionary review is desirable, where  $a < t^* < b$ , and outside of which discretionary review is undesirable. In particular, since  $D(0) = 0$  and  $D(q)$  is continuous in  $q$ , we also know that discretionary review must be undesirable in a neighborhood of 0. This implies that  $a > 0$ , where  $a$  is defined by

$$(9) \quad D(a) = \alpha_l + \alpha_c.$$

Likewise, since (7) holds and (6) is continuous in  $q$ , discretionary review must be undesirable in a neighborhood of 1. This implies that  $b < 1$ , where  $b$  is defined by

$$(10) \quad D(b) - [bg_s - (\beta_l + \beta_c)] = \alpha_l + \alpha_c.$$

The following statement describes the conclusions that we have reached.

*Proposition 1.* The socially optimal appeals system depends on whether the costs of discretionary review,  $\alpha_l + \alpha_c$ , are below a threshold,  $D(t^*)$ .

(a) Suppose that the costs of discretionary review are below the threshold. Then

(i) if the appellant's prior probability  $q$  of reversal is sufficiently low – is in  $[0, a]$ , where  $0 < a < t^*$  and  $a$  is defined by (9) – then there should be no appeal and no discretionary review.

(ii) If the appellant's prior probability  $q$  is in a midrange  $(a, b)$  – where  $t^* < b < 1$  and  $b$  is defined by (10) – then there should be discretionary review. After discretionary review, there should be appeal if and only if the appeals court's probability  $p$  exceeds  $t^*$ .

(iii) If the appellant's prior probability  $q$  is sufficiently high – is in  $[b, 1]$  – then there should be no discretionary review but there should be appeal.

(b) Suppose that the costs of discretionary review  $\alpha_l + \alpha_c$ , equal or exceed the threshold,  $D(t^*)$ . Then

(i) if the appellant's prior probability  $q$  of reversal is sufficiently low – less than  $t^*$  – there should be no appeal and no discretionary review.

(ii) If the appellant's prior probability  $q$  of reversal exceeds  $t^*$ , there should be no discretionary review but there should be appeal. ■

Figure 3 illustrates the proposition.

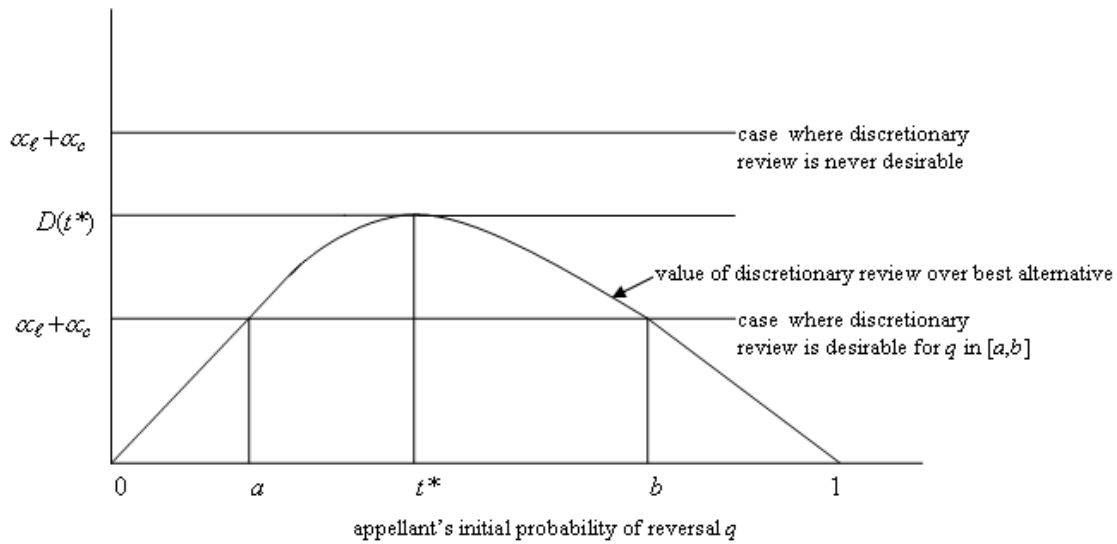


Figure 3. Value and Cost of Discretionary Review

Note that the proposition implies that a regime of appeals only is not generally socially desirable. In such a regime, because discretionary review cannot occur, appeal is made if and only if  $q > t^*$ . This generates two types of loss relative to the optimal outcome (in the case where some discretionary review is desirable because (8) holds). First, for  $q$  in  $(a, t^*)$ , no appeal is brought, whereas discretionary review might result in appeal when that would be desirable. Second, for  $q$  in  $(t^*, b)$ , appeal is brought, whereas discretionary review might result in termination of the case and save costs when that would be desirable.

The proposition also implies that a regime of discretionary review only is not generally socially desirable. In such a regime, because immediate appeal cannot occur, there is a loss if  $q > b$ : in that situation, discretionary review occurs, whereas direct appeal saves costs on average because discretionary review is likely to lead to appeal.

Finally, note that had I not made the assumption of stochastic dominance, the value of discretionary review over the best alternative might not have been increasing and then decreasing. Hence the region over which discretionary review is desirable might not have been an interval, but the results would otherwise be the same (and in particular, there has to be a neighborhood of 0 in which neither discretionary review nor appeal is desirable, and a neighborhood of 1 in which discretionary review is not desirable but appeal is desirable).

### 3.3 Actual Behavior and Optimal Policy

I here consider actual behavior of appellants and appeals courts and then ask about social policy that can improve social welfare.

Let the gain to an appellant from reversal be

$g_l =$  expected gain to an appellant due to a reversal;  $g_l > 0$ ;<sup>39</sup>

and assume that an affirmance has no value to an appellant. The expected utility of an appellant is assumed to be the appellant's expected gain from a reversal minus expected litigation costs (and other expenses to be noted). Additionally, let

$g_c =$  expected gain to the appeals court due to a reversal;  $g_c > 0$ ;<sup>40</sup>

and assume that an affirmance has no value to the appeals court. The expected utility of the appeals court is assumed to be its expected gain from a reversal minus a weighted sum of the appellant's and its litigation costs. Let

$k_l =$  weight given to an appellant's cost by the appeals court;  $k_l \geq 0$ ;

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<sup>39</sup> It is plausible that  $g_l$  differs from  $g_s$ . For example,  $g_l$  could exceed  $g_s$  if reversal would yield a plaintiff victory and significant damages whereas result in little deterrence, and  $g_l$  could be less than  $g_s$  if reversal would yield a plaintiff only modest damages but create substantial deterrence or a significant change in precedent.

<sup>40</sup> It is possible that  $g_c$  differs from  $g_s$  because an appeals court judge might have views that depart from society's.



$k_c$  = weight given to the appeals court's cost by the appeals court;  $k_c \geq 0$ .

I now briefly describe the behavior of the appeals court and of appellants, assuming that appellants may choose their action: not to appeal, to employ discretionary review, or to appeal.

If the appeals court engages in discretionary review, the court will decide to hear a case when

$$(11) \quad pg_c \geq (k_l\beta_l + k_c\beta_c), \text{ or when } p \geq (k_l\beta_l + k_c\beta_c)/g_c = t_c^*.$$

The expected value to the appellant of discretionary review (gross of his costs) as a function of the his prior probability of reversal  $q$  is

$$(12) \quad \begin{aligned} D_l(0) &= 0; \\ D_l(q) &= \int_{t_c^*}^1 [pg_l - \beta_l]h(p|q)dp \text{ for } q \text{ in } (0, 1); \\ D_l(1) &= g_l - \beta_l, \end{aligned}$$

where (reasoning as with regard to  $D(q)$ ), we know that  $D_l(q)$  is continuous and monotonically increasing in  $q$  on  $[0, 1]$ .

If the appellant does not engage in discretionary review, he would undertake an appeal when

$$(13) \quad qg_l \geq \beta_l, \text{ or when } q \geq \beta_l/g_l = t_l^*.$$

The appellant's decision whether to engage in discretionary review is thus as follows. If  $q < t_l^*$ , since he would not undertake an appeal, he will choose discretionary review if and only if  $D_l(q) > \alpha_l$ . If  $q \geq t_l^*$ , since he would undertake an appeal if he did not choose discretionary review, the value of discretionary review over appeal is

$$(14) \quad D_l(q) - [qg_l - \beta_l] = \int_0^{t_l^*} [\beta_l - pg_l]h(p|q)dp,$$

which is monotonically decreasing in  $q$  and which is 0 at  $q = 1$ . For such  $q$ , the appellant will undertake discretionary review if and only if  $D_l(q) - [qg_l - \beta_l] > \alpha_l$ .

Hence, reasoning as before, we know that if and only if

$$(15) \quad D_l(t^*) = \int_{t_l^*}^1 [pg_l - \beta_l]h(p|t_l^*)dp > \alpha_l,$$

are there  $q$  for which discretionary review will be chosen. In that case, there is a positive interval  $(a_l, b_l)$ , in which discretionary review is desirable, where  $0 < a_l < t_l^* < b_l < 1$ , with  $a_l$  and  $b_l$  defined by

$$(16) \quad D_l(a_l) = \alpha_l$$

$$(17) \quad D_l(b_l) - [b_l g_l - \beta_l] = \alpha_l.$$

The next proposition describes the behavior of an appellant.

*Proposition 2.* The privately optimal decision of an appellant whether or not to make an appeal or engage in discretionary review depends on whether the appellant's costs of discretionary review,  $\alpha_l$ , are below a threshold,  $D_l(t_l^*)$ .

(a) Suppose that the appellant's costs of discretionary review are below the threshold.

Then

(i) if the appellant's prior probability  $q$  of reversal is sufficiently low – in  $[0, a_l]$ , where  $a$  is positive, less than  $t_l^*$ , and is defined by (16) – he will not make an appeal and will not request discretionary review.

(ii) If the appellant's prior probability  $q$  is in a midrange  $(a_l, b_l)$  – where  $b_l$  exceeds  $t_l^*$ , is defined by (17) and is less than 1 – then the appellant will elect discretionary review. After discretionary review, there will be an appeal if and only if the appeals court probability  $p$  exceeds  $t_c^*$ .

(iii) If the appellant's prior probability  $q$  is sufficiently high – is in  $[b_l, 1]$  – then there will be no discretionary review but there will be appeal.

(b) Suppose that the appellant's costs of discretionary review,  $\alpha_l$ , are at least equal to the threshold,  $D_l(t_l^*)$ . Then

(i) if the appellant's prior probability  $q$  of reversal is sufficiently low – less than  $t_l^*$  -- he will not make an appeal and will not obtain discretionary review.

(ii) If the appellant's prior probability  $q$  of reversal exceeds  $t_l^*$ , he will make an appeal. ■

In other words, the behavior of an appellant is qualitatively similar to that described in Proposition 1.

The behavior of appellants is not generally socially optimal. One factor leading to suboptimality is that the appellant bears only his own costs of appeal or of discretionary appeal, not those of the court.<sup>41</sup>

The cost distortion implies that the appellant may have an excessive incentive to make an appeal; it is cheaper for the appellant to make an appeal than it is for society to have that happen.<sup>42</sup>

However, the cost distortion does not necessarily imply that the appellant has an excessive incentive to engage in discretionary review. Suppose first that, if he did not engage in discretionary review, he would not make an appeal. Then the value of discretionary appeal is the expected private value of appeals, and this value is socially

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<sup>41</sup> And, as I noted in section 2, not those of his adversary in the appeal.

<sup>42</sup> Assume that  $g_s = g_l = g$ , so that the only distorting factor at issue concerns the appellant's bearing of costs. Comparing (13) and (5), we then know that the appellant will make an appeal when  $qg \geq \beta_l$  and that it is socially optimal for him to make an appeal when  $qg \geq \beta_l + \beta_c$ . Hence, appeals will occur too often when  $\beta_l + \beta_c > qg > \beta_l$ .

excessive (due to the fact he does not pay the full social costs of appeal). Hence, both because the value of discretionary review is excessive and because its cost too low, the appellant would tend to have an excessive incentive to make a discretionary appeal.<sup>43</sup> But if the appellant would make an appeal if he did not engage in discretionary appeal, the value of discretionary appeal is the savings from avoiding an appeal that is unlikely to succeed. But this savings is *less* than the social savings (because what the appellant would have paid to make an appeal is only his own costs).<sup>44</sup> Hence, in this case it is not clear what the direction of bias is in the appellant's incentives: the costs of discretionary review and its benefits are both less than society's.

A second factor leading to suboptimality of appellant behavior is that there may be a difference between the appellant's private gains from appeal and society's. Suppose that  $g_l < g_s$  (the other case is analogous). Then other things equal, the appellant will have an inadequate incentive to make an appeal.<sup>45</sup> He will also tend to have an inadequate

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<sup>43</sup> Assume that  $g_s = g_l = g$  as in the previous note and also that  $t_c^* = t^*$  (the appeals court's incentives are socially correct). Comparing (12) and (4), we know that for  $q$  for which appeal would not otherwise be made, the value of discretionary review is

$$D_l(q) = \int_{t^*}^1 [pg - \beta_l] h(p|q) dp,$$

whereas the social value is

$$D(q) = \int_{t^*}^1 [pg - (\beta_l + \beta_c)] h(p|q) dp.$$

Hence,  $D_l(q) > D(q)$ .

<sup>44</sup> Assume again that  $g_s = g_l = g$  and that that  $t_c^* = t^*$ . Comparing (14) and (6), we know that for  $q$  for which appeal would otherwise be made, the value of discretionary review is

$$\int_0^{t^*} [\beta_l - pg] h(p|q) dp,$$

whereas the social value is

$$\int_0^{t^*} [(\beta_l + \beta_c) - pg] h(p|q) dp.$$

The private value of discretionary review is therefore less than the social.

<sup>45</sup> Assume that  $\beta_c = 0$  and that  $t_c^* = t^*$ , so that there are no distortions other than due to a difference in  $g_l$  and  $g_s$ . Suppose that  $g_l < g_s$ . Then from (13) and (5), we know that appeals will occur

incentive to make a discretionary appeal if otherwise he would not make an appeal, but would have an excessive incentive to make a discretionary appeal if otherwise he would make an appeal.<sup>46</sup>

The appeals court's incentives in its discretionary review may also be distorted. If the appeals court puts too little weight on the costs of an appeal, it will agree to hear too many appeals; if it puts too much weight on the costs of appeal, it will hear too few. And if its valuation of reversal differs from society's this also creates an obvious distortion in its choice.<sup>47</sup> Any distortion in appeals court behavior in discretionary review will affect the appellant, who will take the distortion into account (through  $t_c^*$ ).

Given these observations about suboptimality of appellants' and appeals courts' behavior, it is natural to ask about policies that could improve social welfare.

One category of social policy is limiting the choices of appellants over types of appeal. Consider the following three possibilities of available types of appeal: (i) either type of appeal – discretionary review or appeal; (ii) appeal only; (iii) discretionary review only. Any of these three regimes could be superior to the other two. Discretionary review or appeal (regime (i)) would be best if, for example, the distortions discussed

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when  $qg_l \geq \beta_l$ , whereas they should occur when  $qg_s \geq \beta_l$ , so that they will not occur when they should when  $qg_s \geq \beta_l > qg_l$ .

<sup>46</sup> Assume again that  $\beta_c = 0$  and that  $t_c^* = t^*$ , that  $g_l < g_s$ , and consider the value of discretionary appeal when otherwise there would be no appeal. This value is  $D_l(q)$  for the appellant and  $D(q)$  for society. It is clear that the appellant's value of discretionary review would be too low, that  $D_l(q) < D(q)$ , for the integrand in the former is  $pg_l - \beta_l$  whereas in the latter it is  $pg_s - \beta_l$ . However, the value of discretionary appeal when otherwise there would be appeal would be too high for the appellant, since the relevant integrand for the appellant is  $\beta_l - pg_l$ , which exceeds that for society,  $\beta_l - pg_s$ .

<sup>47</sup> Comparing (11) to (3), we see that the appeals court will make an appeal when  $pg_c \geq (k_l\beta_l + k_c\beta_c)$  whereas it is socially desirable for that to happen when  $pg_s \geq (\beta_l + \beta_c)$ . Hence, if  $g_c = g_s$ , so that there is no distortion caused by a difference in the court's valuation of a reversal, it will hear too many appeals when  $(k_l\beta_l + k_c\beta_c) < (\beta_l + \beta_c)$ . Likewise, if  $(k_l\beta_l + k_c\beta_c) = (\beta_l + \beta_c)$ , so that there is no distortion caused by a difference in the court's weighting of costs, it will hear too many appeals when  $g_c > g_s$ .

above were low, for in the absence of distortions we know that choice between the two types must be best when discretionary review is sometimes desirable.<sup>48</sup> Appeal only (regime (ii)) could be desirable if appellants would often want to choose discretionary review but this could be socially undesirable because, say, the appellants do not bear the social cost of discretionary review.<sup>49</sup> Discretionary review only (regime (iii)) could be desirable if, for example, the social costs of appeal are relatively high, making the overuse of appeals significant.<sup>50</sup>

A different social policy involves corrective fees for appeals and discretionary review as well as incentives based on the occurrence of reversals. With such a policy, the objectives of both appellants and of the appeals court can be converted to the social objective. In particular, suppose the following: for an appeal, appellants must pay a fee equal to judicial costs  $\beta_c$ ; for discretionary review, the fee is  $\alpha_c$ ; if there is a reversal, appellants receive an incentive payment of  $g_s - g_l$  (which would be negative if  $g_l > g_s$ ). Also, suppose the following for the appeals court: for appeal to occur, the court must pay

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<sup>48</sup> Suppose that  $g_c = g_s$  and that  $k_l = k_s = 1$ , so that the appeals court's objective is the same as society's. Suppose also that  $g_l = g_s$  and that  $\beta_c = r\beta_l$  and  $\alpha_c = r\alpha_l$ , where  $r$  is positive. As  $r$  tends to 0, the appellant's objective function tends toward the social one. Hence, by Proposition 1, social welfare must tend toward the first-best level when appellants choose between discretionary review or appeal, whereas (assuming that discretionary review is sometimes optimal), social welfare will be lower if appellants can only choose discretionary review (for then when  $q > b$  direct appeal cannot be chosen even though it is socially desirable), and social welfare will also be lower if appellants can only choose appeal (for then when  $a \leq q \leq b$ , discretionary review cannot be chosen even though it is socially desirable).

<sup>49</sup> Suppose as in the previous note that  $g_c = g_s$  and that  $k_l = k_s = 1$ , so that the appeals court's objective is the same as society's. Suppose also that  $g_l = g_s$ , that  $\alpha_l = 0$ , and that  $\alpha_c$  is sufficiently high that (8) is not satisfied, meaning that discretionary review is never socially desirable. Appellants, however, would always choose discretionary review over appeal because  $\alpha_l = 0$ . Hence, social welfare will be higher if appeal only is available to appellants.

<sup>50</sup> Suppose again that  $g_c = g_s$  and that  $k_l = k_s = 1$ , so that the appeals court's objective is the same as society's. Suppose also that  $g_l = g_s$ , that  $\beta_l = 0$ , that  $\alpha_l > 0$ , and that  $\alpha_l + \alpha_c$  satisfy (8) so that discretionary appeal is desirable in  $[a, b]$ , where  $0 < a < b < 1$ . Appellants, however, will never choose discretionary review since it involves positive cost for them whereas direct appeal does not. It follows that social welfare will be higher if discretionary review only is available, provided that the probability that  $q$  is in  $[a, b]$  is sufficiently high.

a fee equal to  $(\beta_l + \beta_c) - (k_l\beta_l + k_c\beta_c)$ ; if there is a reversal, the court receives an incentive payment of  $g_s - g_c$ . Then if there is discretionary review, the appeals court will hold an appeal if and only if

$$(18) \quad p[g_c + (g_s - g_c)] \geq (k_l\beta_l + k_c\beta_c) - [(\beta_l + \beta_c) - (k_l\beta_l + k_c\beta_c)] \text{ or when } pg_s \geq \beta_l + \beta_c,$$

which is (3). Hence, if there is discretionary review, there will be an appeal if and only if  $p \geq t^*$ , which is socially optimal. It also follows that if appellants can choose whether

to have discretionary appeal or direct appeal, they will make the socially correct

decisions. To see this, observe that the expected value of discretionary review to an

appellant  $D_l(q)$  equals its social value  $D(q)$ : if  $q = 0$ ,  $D_l(q)$  is clearly 0; if  $q$  is in  $(0, 1)$ , the

integrand in (12) becomes  $p[g_l + (g_s - g_l)] - (\beta_l + \beta_c) = pg_s - (\beta_l + \beta_c)$ , which is the

integrand in (4) and  $t_c^* = t^*$  because of (18), so that  $D_l(q) = D(q)$ ; and if  $q = 1$ , the

appellant's position is  $[g_l + (g_s - g_l)] - (\beta_l + \beta_c) = g_s - (\beta_l + \beta_c)$ , which is  $D(1)$ . Also,

the expected value of an appeal to an appellant equals its social value: its expected value

to an appellant is  $q[g_l + (g_s - g_l)] - (\beta_l + \beta_c) = qg_s - (\beta_l + \beta_c)$ . It follows from these

observations that the appellant will behave socially optimally when choosing among

doing nothing, appeal, and discretionary review. We summarize these points in the

following.

*Proposition 3.* (a) Considering the following three regimes regarding appellants' choices over appeal: (i) discretionary review or direct appeal is available; (ii) only appeal is available; (iii) only discretionary review is available. Any of these regimes could be superior.

(b) Suppose that appellants pay a fee equal to the court costs  $\beta_c$  for an appeal and a similar fee  $\alpha_c$  for discretionary review and that they receive a payment of  $g_s - g_l$  for a

reversal; and suppose that the appeals court pays a fee of a fee equal to  $(\beta_l + \beta_c) - (k_l\beta_l + k_c\beta_c)$  if it decides there should be an appeal after discretionary review and that it receives a payment of  $g_s - g_c$  for a reversal. Then the socially optimal outcome will be achieved if appellants can choose either discretionary review or appeal but generally not if appellants can only choose discretionary review or only choose appeal. ■

### 3.4 Extensions

*Discretionary Review Lowers The Cost of Appeal:* Let us consider the possibility that a fraction  $\lambda$  of expenditures on discretionary review directly offsets the cost of future appeal, because some of the tasks during discretionary review do not need to be repeated on appeal. That is, assume that if there is discretionary review, then the cost of an appeal falls to  $(\beta_l + \beta_c) - \lambda(\alpha_l + \alpha_c)$  from  $(\beta_l + \beta_c)$ , its cost if there is no discretionary review. It was assumed above that  $\lambda$  was 0, but a positive  $\lambda$  is more realistic. Note that  $\lambda = 1$  corresponds to the situation where all expenditures on discretionary review are for tasks that would be undertaken in a full appeal.

We will now examine how this generalization of the model involving positive  $\lambda$  affects the analysis of social optimality. It clearly has no effect on the condition under which appeal ought to be undertaken if there is no discretionary review. However, it does affect the analysis of discretionary review in two ways. First, given that there is discretionary review, appeal ought to be undertaken more often: an appeal ought to occur whenever

$$(3') \quad pg_s \geq (\beta_l + \beta_c) - \lambda(\alpha_l + \alpha_c), \text{ or when } p \geq [(\beta_l + \beta_c) - \lambda(\alpha_l + \alpha_c)]/g_s = t(\lambda)^*,$$

where  $t(\lambda)^* < t^*$  if  $\lambda > 0$  and  $t(\lambda)^*$  is decreasing in  $\lambda$ . Since appeal becomes cheaper once discretionary review has occurred, the threshold probability for undertaking it becomes



lower. Second, that appeal is undertaken more often, and that it is cheaper when undertaken, raises the value of discretionary review. In particular, its value is given by

$$D(0, \lambda) = 0$$

$$(4') \quad D(q, \lambda) = \int_{t(\lambda)^*}^1 \{pg_s - [(\beta_l + \beta_c) - \lambda(\alpha_l + \alpha_c)]\} h(p|q) dp \quad \text{for } q \text{ in } (0, 1)$$

$$D(1, \lambda) = g_s - [(\beta_l + \beta_c) - \lambda(\alpha_l + \alpha_c)].$$

It is clear that, for  $q$  in  $(0, 1)$ ,  $D(q, \lambda)$  increases with  $\lambda$  since the integrand rises with  $\lambda$  and  $t(\lambda)^*$  falls with  $\lambda$ . Also  $D(1, \lambda)$  rises with  $\lambda$ . Additionally, it can be confirmed along the lines in the basic model that  $D(q, \lambda)$  is monotonically increasing in  $q$ .

Let us compare discretionary review to its alternative. If  $q < t^*$ , there would be no appeal in the absence of discretionary review. Thus, for such  $q$ , discretionary review is desirable if and only if  $D(q, \lambda) > \alpha_l + \alpha_c$ . Since  $D(q, \lambda)$  is increasing in  $\lambda$ , discretionary review is desirable more often than in the basic model and more often the higher is  $\lambda$ .

If  $q \geq t^*$ , then appeal is desirable in the absence of discretionary review. In this case, social welfare is  $qg_s - (\beta_l + \beta_c)$ . Therefore, for such  $q$ , the value of discretionary review over the best alternative is

$$(6') \quad D(q, \lambda) - [qg_s - (\beta_l + \beta_c)]$$

$$= \int_0^{t^*(\lambda)} [(\beta_l + \beta_c) - pg_s] h(p|q) dp + (1 - H(t^*(\lambda)|q)) \lambda(\alpha_l + \alpha_c).$$

This is the expected savings from not engaging in appeal when it turns out that  $p$  is below  $t^*(\lambda)$ , plus the savings in carrying out appeals due to discretionary review having been undertaken (note that this second term has no counterpart in (6)). Hence, discretionary review is desirable if and only if (6') exceeds  $\alpha_l + \alpha_c$ . Since (6') is increasing in  $\lambda$  (this is

clear from the first expression), discretionary review is desirable for  $q \geq t^*$  more often than in the basic model and more often the higher is  $\lambda$ .

As before, however, discretionary review is not desirable if  $q$  is sufficiently close to 1 and  $\lambda < 1$ , for at  $q = 1$ , (6') reduces to  $\lambda(\alpha_l + \alpha_c)$ , which is less than the cost of discretionary appeal  $(\alpha_l + \alpha_c)$ .

It follows from what has been said, the facts that  $D(q, \lambda)$  is increasing in  $\lambda$  and that  $D(q, \lambda) - [qg_s - (\beta_l + \beta_c)]$  is decreasing in  $\lambda$  for  $q \geq t^*$ ,<sup>51</sup> and the logic preceding Proposition 1, that the proposition carries forward in the present case. In this case the interval over which discretionary review is desirable is now  $[a(\lambda), b(\lambda)]$ , where  $a(\lambda)$  falls with  $\lambda$  and  $b(\lambda)$  increases with  $\lambda$ , and where  $0 < a(\lambda) < b(\lambda) < 1$ , provided that  $\lambda < 1$ .

The special case where  $\lambda = 1$ , which is to say, where all costs of discretionary review reduce the costs of an appeal, is of note. In that case, if  $q > t^*(1)$ , so that appeal would be made in the absence of discretionary review, discretionary review is superior to appeal no matter how high is  $q$ . This can be seen directly: if discretionary review results in appeal (that is, if  $p > t^*(1)$ ), total costs are the same as if there were a direct appeal (namely,  $(\alpha_l + \alpha_c) + [(\beta_l + \beta_c) - (\alpha_l + \alpha_c)] = (\beta_l + \beta_c)$ ); and if discretionary review results in no appeal, the outcome is better than if there had been an appeal. Hence, direct appeal is never desirable.

The analysis of the social versus the private incentive to choose between discretionary review and appeal, or to do nothing, would proceed analogously to the basic case.

*Appellant Has Private Information Not Learned During Discretionary Review:*

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<sup>51</sup> It can be verified that these statements are true by integrating by parts, proceeding as in note 37 above.

Let me now consider how the analysis in the basic model would change if we allow the appellant to have private information that would not be learned by the appeals court during discretionary review, but would be learned in an appeals proceeding. I will call such information *initially private*. Such information may exist because discretionary review, being a less complete legal procedure than appeal, may not involve consideration of some issues about which the appellant can adduce arguments and evidence in the appeals stage. For the model to accommodate initially private information, let me make the following assumptions.

$(x, y)$  = information observed by the appellant;

$(x, r)$  = information observed in discretionary review by the appeals court;

$(x, y, r, s)$  = information observed in an appeal by the appeals court.

The interpretation of the assumptions is as follows:  $x$  is information about the case that the appellant would present to the appeals court either in a discretionary review or in appeal;  $y$  is initially private information that the appellant would not be able to present in a discretionary review but would be able to present in an appeal;  $r$  is information that becomes available to the appeals court during discretionary review apart from what the appellant presents; and  $s$  is information that becomes available to the appeals court during an appeal, apart from what the appeals court may have learned in discretionary review and from what appellants present. I assume that the appeals court has the same information,  $(x, y, r, s)$  available on appeal, whether or not there has already been a discretionary review. The vector of information  $(x, y, r, s)$  available to the appeals court determines a definite outcome,  $\eta(x, y, r, s)$ , which is either R, reversal, or A, affirmance.

Suppose that there is a joint probability distribution  $F$  over  $(x, y, r, s)$  that is common knowledge. We can then determine the initial probability  $q$  of reversal given any observation  $(x_o, y_o)$  of the appellant, namely,

$$(19) \quad q(x_o, y_o) = \Pr\{(x_o, y_o, r, s) \text{ such that } \eta(x_o, y_o, r, s) = R\},$$

where  $\Pr$  designates probability. We can also determine the appeals court's probability  $p$  of reversal given any observation  $(x_o, r_o)$  it makes in discretionary review, namely,

$$(20) \quad p(x_o, r_o) = \Pr\{(x_o, y, r_o, s) \text{ such that } \eta(x_o, y, r_o, s) = R \text{ and } (x_o, y) \text{ is such that discretionary review is chosen}\}.$$
<sup>52</sup>

Observe that  $q(x_o, y_o)$  is in general not equal to the expected value of  $p(x_o, r)$ , for the appeals court's information is not a refinement of the appellant's. For example, as explained in the text, the appellant might expect  $r$  to be less helpful in predicting the outcome of an appeal than  $y$ , and could be anticipated to be either higher than  $q(x_o, y_o)$  or lower than  $q(x_o, y_o)$ .

Observe also that this model reduces to the basic model when there is no initially private information (or equivalently, there is just one possible value of  $y$ ). In that case  $q(x_o, y_o)$  is just  $q(x_o)$ , so that  $p(x_o, r_o)$  is a probability based on more information than  $q$ , and  $q(x_o)$  is equal to the expected value of  $p(x_o, r_o)$ .

Now let me sketch the analysis of socially optimal behavior. The description of when the appeals court should undertake an appeal after discretionary review is given by the analogue of (3), that is, appeal should be undertaken when

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<sup>52</sup> Note that because this probability is conditional on  $(x_o, y)$  being such that discretionary review is chosen, the probability depends on the appeals court's strategy for accepting appeals. The strategy that the appeals court would employ would be similar to that analyzed in Daughety and Reinganum (2000), because there, as here, the appellant has information that the appeals court does not have and the appeals court has information that the appellant does not have.

$$(21) \quad p(x, r) \geq (\beta_l + \beta_c)/g_s = t^*.$$

The value of discretionary review must now be written as a function of the information  $(x, y)$  of the appellant and in general is given by

$$(22) \quad D(x, y) = \int_{\{r|p(x, r) \geq t^*\}} [p(x, y, r)g_s - (\beta_l + \beta_c)]dF(r|(x, y)).$$

Here  $p(x, r, y)$  means the probability of reversal given  $(x, y, r)$ .

If discretionary review does not occur, an appeal should be undertaken when

$$(23) \quad q(x, y)g_s \geq \beta_l + \beta_c, \text{ or when } q(x, y) \geq t^*.$$

If  $(x, y)$  is such that appeal alone would not be desirable, that is, (21) does not hold, then discretionary review is desirable if

$$(24) \quad D(x, y) > \alpha_l + \alpha_c.$$

If  $(x, y)$  is such that appeal alone would be desirable, that is, (21) does hold, then the discretionary review should be undertaken when

$$(25) \quad D(x, y) - [q(x, y)g_s - (\beta_l + \beta_c)] = \int_{\{r|p(x, r) \leq t^*\}} [(\beta_l + \beta_c) - p(x, y, r)g_s]dF(r|(x, y)) > \alpha_l + \alpha_c.$$

In general, there will  $(x, y)$  for which no appeal is desirable, discretionary review is desirable, and direct appeal is desirable, as in Proposition 1, and there will be departures from socially desirable behavior given the private incentives of actors, as in the basic model.

The main difference that the existence of initially private information makes to socially desirable behavior is that it complicates the decision of whether to engage in discretionary review. But the presence of initially private information does not alter the main qualitative conclusion of the analysis, which is that the appellant's information is needed to determine the socially optimal decision and that, even in the presence of incentive problems, it will often be optimal to harness this information by giving the

appellant the option to choose whether to make an appeal or whether to elect discretionary review.

#### 4. The Observed Appeals Process

Before I interpret the theoretical analysis, it will be helpful to review major facts about appeals processes. An appeals process is an almost universal feature of adjudication. In virtually all state-sanctioned legal systems in the world, including those of administrative agencies (such as the Social Security Administration), litigants who are disappointed with initial judicial outcomes enjoy some right of appeal,<sup>53</sup> and in many private adjudicative systems (such as those of employers, religious bodies, and trade associations) the same is true.<sup>54</sup>

Specifically, litigants ordinarily possess the right to have appeals heard at the first level of appeal.<sup>55</sup> They typically have recourse also to a second level of appeal, usually

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<sup>53</sup> On the existence of appeal rights in formal legal systems worldwide, see generally Herzog and Karlen (1982), Platto (1992), and Shapiro (1981); the latter, however, emphasizes at pp. 194-222 that appeal is sharply limited under Islamic law. On appeals in administrative agencies, see, for example, Mertens (1994, secs. 49B.45-53) and <http://www.irs.gov/individuals/content/0,,id=98196,00.html> (last visited 9/7/2008) regarding the Internal Revenue Service; and Koch and Koplów (1990), Mashaw et al. (1978), and <http://www.socialsecurity.gov/appeals/> (last visited 9/7/2008) regarding the Social Security Administration.

<sup>54</sup> See, for example, Scott (1965, chap. 3) on employers, Coriden et al (1985, pp. 1000-1002) on the Catholic Church, and Cocoa Merchants' Association of America, Inc., By-Laws, Revised May 12, 2006, <http://www.cocoamerchants.com/bylaws/index.html> (last visited 9/7/2008) on a trade association. However, appeal rights are to my knowledge not ordinarily a feature of private arbitration.

<sup>55</sup> See Herzog and Karlen (1982, p. 6), on the right of appeal worldwide at the first-level of appeal. In the U.S. federal court system, appellants enjoy the right of appeal at the first-level under 28 U.S.C. 1291 ("The courts of appeals ... shall have jurisdiction of appeals from all final decisions of the district courts"), which, though explicitly granting only jurisdiction, not mandating its exercise, has been generally interpreted as conferring a right to appeal from all final decisions of the district courts. In U.S. state court systems in which an intermediate appellate court level exists, appellants usually possess the right of appeal, although there are various exceptions regarding interlocutory, original proceeding, and administrative agency cases. See, for example, State Court Structure Charts, [http://www.ncsonline.org/D\\_Research/csp/2006\\_files/IntroductiontoSCCS06.pdf](http://www.ncsonline.org/D_Research/csp/2006_files/IntroductiontoSCCS06.pdf) (last visited 9/7/2008), and Flango and Rottman (1998, pp. 7-30). On the right of appeal at the first-level in administrative agencies, see, for example, <http://www.irs.gov/newsroom/article/0,,id=108768,00.html> (last visited on 9/7/2008) on the Internal Revenue Service and <http://www.ssa.gov/pubs/10041.html> (last visited on 9/7/2008) on the Social Security Administration; and for the right of appeal in private judicial systems, see,

to a supreme court. At the United States Supreme Court, appeals are subject to discretionary review;<sup>56</sup> in state supreme courts, appeals are more often subject to discretionary review than not, but their status is very much mixed.<sup>57</sup> In other Common Law countries, appeal to the supreme court tends to be discretionary.<sup>58</sup> In the supreme courts of civil law countries, appeals are generally not subject to discretionary review, but the categories of case for which appeals may be brought is usually restricted.<sup>59</sup>

Of note from this description is that there are no contexts in which litigants are able to choose between discretionary review and a direct appeals proceeding. Thus, to my knowledge, the appeals process is never designed in the manner that I have explained may well be socially desirable in Sections 2 and 3.

The level of judicial attention devoted to the appeals process is significant. In federal and state courts of the United States, the annual volume of appeals is approximately 340,000,<sup>60</sup> and the volume of appeals in major civil law countries is

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for example, Scott (1965, p. 78) on employers, <http://www.cocoamerchants.com/bylaws/index.html>, Rule 8 – Appeals, (b) (last visited 9/7/2008) on the Cocoa Merchants’ Association of America, and Coriden et al. (1985, pp. 953-959) on the Catholic Church.

<sup>56</sup> The discretionary authority of the United States Supreme Court is virtually unfettered, under the Judiciary Act of 1925, 43 Stat. 936, and under 1988 legislation, Pub. L. 100-352, codified at 12 U.S.C. § 1257.

<sup>57</sup> Strickland et al (2007, p. 152) reports that in 21 state supreme courts surveyed, 58,258 discretionary jurisdiction petitions were filed and 25,728 mandatory jurisdiction appeals were filed in 2005. In some state supreme courts all cases are subject to discretionary review; in others, all cases are subject to mandatory review; and in others, whether a case is subject to discretionary review or mandatory review depends on the type of the case. On the jurisdiction of state supreme courts, see the detailed charts in Strickland et al (2007, pp. 16-67) and, for example, Flango and Rottman (1998, pp. 13-17), and Eisenberg and Miller (2008).

<sup>58</sup> See Herzog and Karlen (1982, p. 54) and Platto (1992).

<sup>59</sup> See Herzog and Karlen (1982, pp. 54-57) and Platto (1992).

<sup>60</sup> The number of appeals filed in federal courts was 66,618 in 2006 and 58,410 in 2007; see AO (2008, p. 13). The number of appeals filed in state courts was approximately 280,000 in 2005, see LaFountain, et al (2007, p. 68).

comparable.<sup>61</sup> The rate of the filing of appeals in the United States federal courts is about 11% of trial court cases filed and about 41% of cases that resulted in a judgment; the rate in state courts is lower.<sup>62</sup> In several civil law systems, the appeals filing rate, based on cases that resulted in a trial court judgment, ranged from about 15% to 26%.<sup>63</sup> The majority of appeals work is performed at the first level of appeals, as is reflected in the high proportion of appeals court judges relative to supreme court judges; 95% of federal appellate judges are appeals court judges (that is, only 5% are Supreme Court Justices), and 79% of state appellate judges are appeals court judges.<sup>64</sup> The level of litigant resources expended on appeals presumably mirrors the judicial effort and is substantial.

The outcome of appeals depends importantly on whether they are as of right or are heard only after discretionary review. In the United States federal courts, the reversal

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<sup>61</sup> In France the number of appeals made in 2004 was about 225,000; in Spain, the number of appeals filed in 2007 was about 103,000; and in Germany, the number of appeals filed in 2006 was about 125,000. These figures on appeals are for civil cases only and exclude appeals from default judgments and interlocutory appeals; they include appeals made at supreme courts. The figures (and those in notes 63 and 67 *infra*) were compiled for me by Holger Spamann, using the following official publications: Ministère de la Justice (2007), Consejo General del Poder Judicial (2008), and Statistisches Bundesamt (2008a, b).

<sup>62</sup> See Eisenberg (2004, p. 664), who carefully examined federal case statistics over the period 1987-1996. The rate of the filing of appeals in state courts is lower than in federal courts, as Eisenberg and Heise (2008), note at sec. 4.1. Indeed, according to LaFountain, et al. (2007, p. 23), there were approximately 45.3 million non-traffic related cases filed in 2005, and since the number of appeals was about 280,000 (see note 53), the overall rate is less than 1%, which probably reflects a very large number of cases that are uncontested or of small dollar magnitude. Note, however, that the most informative appeals rate is the rate at which *decided* cases are appealed, for usually a requirement for an appeal is that a case received a final judgment. 28 U.S.C. § 1291 grants federal courts of appeal “jurisdiction of appeals from all final decisions of the district courts.” Non-final, or interlocutory, appeals are available only in limited circumstances. See 28 U.S.C. § 1292; see also *Catlin v. United States*, 324 U.S. 229, 233-34 (1945) (explaining rationale for the final judgment rule).

<sup>63</sup> In France in 2004, the average appeals rate at appeals courts was 15.1%; in Spain in 2007, the rate was 26.5%; and in Germany in 2006, the rate was 18.3%. See Ministère de la Justice (2007), Consejo General del Poder Judicial (2008), and Statistisches Bundesamt (2008a, b).

<sup>64</sup> In federal courts there were 167 authorized appeals court judges in 2007 and 9 Supreme Court justices, and  $167/176 = 94.9\%$ ; see AO (2008, p. 19). In states that have separate appeals courts and supreme courts, the total number of appeals court judges in 2005 was 1,027 and the total number of supreme court judges was 270, and  $1,027/1,297 = 79.2\%$ ; see Strickland et al. (2007, pp. 165-169).



rate for cases that must be heard is about 20%, whereas the reversal rate for Supreme Court cases is over 70%;<sup>65</sup> in state courts, a study shows that the reversal rate for cases that must be heard is about 28%, whereas the rate for cases under discretionary review is 52%.<sup>66</sup> In major civil law countries, key reversal rates for cases that must be heard range from 18% to 52%;<sup>67</sup> there are no reversal rates for discretionary review as that regime essentially does not exist.

## **5. The Potential Advantages of Modification of the Observed Appeals Process**

### 5.1 Allowing Appellants to Choose Between Discretionary Review and Direct Appeal

As I noted in Section 4, the appeals processes that we observe do not permit appellants to choose between discretionary review and appeal, even though, as demonstrated in Sections 2 and 3, such a regime may be socially desirable and is unambiguously best when private and social incentives are in alignment. I now discuss whether allowing appellants a choice between discretionary review and appeal would practically be expected to improve the functioning of our present system of appeals in two contexts: at the first level of appeals, where there is generally a right of appeal but no right of discretionary review; and at supreme courts in the United States, where there is often a right of discretionary review but no right of direct appeal.

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<sup>65</sup> See Eisenberg and Miller (2008, p. 8).

<sup>66</sup> See Eisenberg and Miller (2008, p. 15). They studied state supreme court cases and separated them into those that were required to be heard (a substantial group) and those subject to discretionary review.

<sup>67</sup> In France in 2004, the reversal rate at appeals courts was 51% and at the supreme court it was 18%. In Spain in 2007, the reversal rate at appeals courts of general jurisdiction was 46%, at commercial courts it was 29%, and at the supreme court it was 11%. In Germany in 2006, the reversal rate at appeals courts was 52%. See Ministère de la Justice (2007), Consejo General del Poder Judicial (2008), and Statistisches Bundesamt (2008a, b).

*Why adding the right of discretionary review at the first level of appeals might be socially desirable.* Let me consider what would occur if we added a right of discretionary review to our present system of first-level appeals. Two major changes would be predicted.<sup>68</sup>

First, many of the approximately 220,000 cases now appealed annually that are as of right would be submitted for discretionary review.<sup>69</sup> Appellants would frequently seek discretionary review in order to save themselves expenses, for discretionary review would be a relatively cheap way for them to learn if their cases would not have a real chance of success and thus not be worthwhile appealing.

To amplify, a discretionary review would likely be significantly less expensive for appellants than a full appeal. A discretionary review would presumably involve the filing of a relatively short written description of the case at issue and the basis of the plea; there would be at most limited responses permitted by the appellee and probably no oral argument.<sup>70</sup> In contrast, a full appeal often would include substantial briefing, opportunity for more ample replies by appellees, and oral argument (but see my comments below on the screening of cases under “full” appeal).

A discretionary review would, however, provide the appeals court with valuable information about the appellant’s prospects for success. Because the appeals court would

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<sup>68</sup> This discussion parallels my remarks at the end of section 2.2 on the social advantages of adding a right of discretionary review to a system with only a right of direct appeal.

<sup>69</sup> The number of cases filed at federal appeals courts has been in the neighborhood of 60,000 in recent years; see AO (2008, p. 13). The number of cases filed at intermediate appellate state courts in 2005 for which review was mandatory was approximately 160,000; see Strickland et al. (2007, p. 152).

<sup>70</sup> Lay (1981, p.1155-56), for example, envisions a simple process in which petitions for discretionary review would be limited to ten pages and appellees would only be allowed to submit objections to a petition for appeal if requested to do so by the appeals court. See also the discussion of the possible contours of discretionary review in Baker (1994a, pp. 919-923).

be apprised of the central elements of the case and of the rationale for the appeal, because errors are sometimes fairly clear once described, and because the appeals court would be predicting its own behavior, it is natural to conjecture that the decision of the appeals court about granting an appeal would reflect a reasonably good indication of the likelihood of appellant success.

If a discretionary review is significantly less expensive than a full appeal and if discretionary review is likely to reflect appreciable information about the likelihood appellant success, appellants might well elect discretionary review over direct appeal. To illustrate, suppose provisionally that discretionary reviews would result in perfect predictions of appellant success. Then, since direct appeals at the first level of appeals succeed let us say about 25% of the time,<sup>71</sup> a perfect discretionary review process would result in decisions to hear appeals 25% of the time, when the appeals would definitely succeed, and in denial to hear appeals 75% of the time, when the appeals would definitely fail. Hence, with the discretionary review process, appellants would succeed just as often as if they made direct appeals but would save the cost of full appeals 75% of the time. It follows that appellants would find the perfect discretionary review attractive if its cost were less than 75% of the cost of an appeal. Of course, the discretionary review process will not in fact be perfect, but if it is a good predictor of appellant outcomes it will hold substantial value. Suppose, for example, that when a discretionary review leads to the hearing of an appeal, the appeal would succeed 80% of the time and that when it results in termination of the case, an appeal would have succeeded only 10% of the time. Then one can show that a discretionary review would lead to an appeal with probability 21.4%,

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<sup>71</sup> Recall from above that first level appeals succeed about 20% of the time in federal courts and that mandatory jurisdiction appeals succeed about 28% of the time in state courts.

saving appellants the cost of a full appeal 78.6% of the time, suggesting that they would often find discretionary review attractive.<sup>72</sup>

In view of the preceding discussion, it seems plausible that a large fraction of the 220,000 parties who now bring direct appeals would instead elect discretionary review were that an option. Suppose that three quarters of these appellants, namely 165,000 of them, would choose discretionary appeal and that that process would lead to appeals court decisions to hear appeals with a probability of 21.4% as just explained. Then the number of appeals would fall from 220,000 to 90,310, comprised of 55,000 appellants who would still make direct appeals and of  $21.4\% \times 165,000$  or 35,310 who would be granted appeals upon discretionary review. The social consequences of such a substantial shift to discretionary review from direct appeal would be similar to the benefits to the appellants, assuming that private and social incentives to use the appeals process are not terribly out of line.

The second major change that would result from according litigants the option of discretionary review is that some litigants who presently do not bring appeals and lump their adverse trial court outcomes would instead request discretionary review. This could be rational on their part because, as I have stressed, discretionary review is cheaper than appeal and can disclose when a case would be worthwhile bringing on appeal. The number of litigants who do not now bring appeals but who would elect discretionary review should be substantial because discretionary review would be distinctly cheaper

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<sup>72</sup> In particular, we are assuming that a discretionary review would result in either a promising evaluation – meaning an 80% likelihood of success and a decision of the court to go forward with an appeal – or an unpromising evaluation – meaning a 10% likelihood of success and a decision to terminate. Let  $p$  be the probability of a promising evaluation. Then  $p$  must satisfy  $.8p + .1(1 - p) = .25$  because 25% is the probability of success in direct appeals. Solving, we obtain  $p = .214$ .

than direct appeal. The social significance of these cases could be real, again assuming that private and social incentives are not too divergent, and if they were, the fee for discretionary review could be raised. It is true that the bringing of these cases for discretionary review would add to the work of the appeals courts, but they would often be doing so for a good reason, namely, the identification at a relatively low social cost of cases where trial court mistakes were likely to have been made.

The foregoing constitute the two main reasons that it seems desirable to grant appellants the right of discretionary review where presently they have only the right of direct appeal. Let me now elaborate on what I have said; as will be seen, these additional considerations, most of which were mentioned in Section 2.5, largely but not entirely reinforce the view that giving appellants the right to choose discretionary review would be socially advantageous.

First, discretionary review becomes more attractive than suggested by the analysis in the main model to the degree that the effort devoted to it serves to reduce the effort involved in a subsequent full appeal. In fact, most of the tasks undertaken by litigants and courts in the course of a discretionary review have the character that they reduce the work associated with an appeal. If the appeals court has already read about a case and has decided that it merits an appeal, then presumably its work in apprising itself about the case in a full appeal will be lessened.<sup>73</sup> Of course, discretionary review may not lead to an appeal, so that the cost of the discretionary review will not be offset by a later reduction in cost. Also, if there is an appeal, there will not be a complete, dollar for

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<sup>73</sup> For example, Baker (1994a, p. 920) states that proponents of discretionary view believe that “Judicial resources spent reviewing petitions for discretionary appeal arguably would approximate the present investments of time and energy screening cases for the nonargument summary calendar, so there would be zero additional judicial effort.”

dollar, reduction in its expense because there will be some tendency of judges to forget what they learned in a discretionary review and also because the appellants may be required to redo some work, if only to satisfy formalities. But one suspects that the cost of an appeal will fall by a substantial fraction of the expense devoted to the case in a discretionary review.

Second, the outcome of a discretionary review could give litigants information about the issues on which they should focus their attention in an appeal. This might constitute a nontrivial advantage of discretionary review because discretionary review could easily convey to litigants knowledge of the issues that the court does or does not find relevant to an appeal.<sup>74</sup> In any event, that discretionary review results in a decision for appeal is significant information in itself and should usually lead parties, desirably, to devote more effort overall to the appeal than they would in the absence of discretionary review.

Third, the existence of a discretionary review can promote settlement of cases. If discretionary review results in approval for a full appeal, uncertainty concerning the outcome is thereby reduced, which should promote settlement. We know that settlement

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<sup>74</sup> When, for example, the U.S. Supreme Court decides to hear an appeal, it often narrows the issues that it will consider from those given in the petition for certiorari. See Gressman et. al. (2007, p. 339), stating that “The discretion that marks the certiorari jurisdiction operates not only in the selection of cases for review but also in the selection of issues to be argued and decided in particular cases. Thus, the Court will frequently limit its granting of a petition for certiorari to particular questions presented in the petition. The Court uses this technique to sift out and concentrate attention on those issues in a case that are worthy of review, while excluding those that reveal no basis for further consideration.”

of cases after appeals are filed often occurs,<sup>75</sup> so that an enhanced settlement rate on account of discretionary review might have more than theoretical importance.

Fourth, the existence of the option of discretionary review can mitigate the problem that I mentioned of attorney self-interest in making appeals, since clients who worry about their prospects of prevailing can test the waters by asking their attorneys to opt for discretionary review. Because about 75% of appeals fail, one suspects that many clients would press their attorneys to do so. There is, though, the perverse possibility that the availability of discretionary review would create a new problem for clients, namely, that opportunistic lawyers who would not have been able to convince clients to make an appeal would be able to persuade them to ask for discretionary review.

Fifth, the option discretionary review might be thought unattractive for appellants who cannot afford to pay for legal services and are provided services gratis.<sup>76</sup> For such appellants, the fact that discretionary review would be cheaper than direct appeal might be considered irrelevant, so that they would elect direct appeal. However, one can imagine a way in which the appellants could be led to elect discretionary review such that they and society would benefit thereby. Suppose that an appellant would receive better legal representation in an appeal granted after a discretionary review than in a direct appeal. Then the appellant might well prefer discretionary appeal, reasoning that he or

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<sup>75</sup> Eisenberg and Heise (2008, p. 26) present statistics showing that 42.5% of appeals that are filed in federal court are not completed and that 56.7% of those filed in state courts are not completed. Many of these appeals drop-outs are probably settled.

<sup>76</sup> In the United States criminal defendants accused of felonies are generally guaranteed counsel under the Sixth Amendment. See U.S. Constitution, Amendment VI, and *Gideon v. Wainwright*, 372 U.S. 335, 342 (1963). This right has been interpreted to extend to appeals. See *Penson v. Ohio*, 488 U.S. 75, 85 (1988). Although civil litigants do not benefit from a broad right to counsel in the United States, they (along with criminal defendants) often obtain legal help from public and private legal aid societies and from counsel who volunteer their services. In civil law countries, the indigent often obtain counsel for appeals; see, for example, Herzog and Karlen (1982, pp. 13-14).

she would obtain better representation in a full appeal precisely when it would be likely to do the most good. Moreover, counsel might find such a system attractive, as it would reallocate their scarce representational resources more rationally, toward investment in the subset of cases that were viewed favorably under discretionary review.

Sixth, the character of discretionary review that is undertaken can be molded by the needs of the appeals system. If a very streamlined, inexpensive review process would provide reasonably good information to the appeals court about the prospects of success on appeal, that process can be adopted; if a fairly considered inquiry about certain issues would be needed by the court to come to a good judgment about whether to go forward, then that inquiry could be undertaken; and possibly the character of the discretionary review could depend on the type of case. There is no need for the discretionary review process to closely resemble the ones we presently employ, and the shape of the process could be influenced by experimentation.

Last, the sieving and filtering of appeals that are brought as of right constitute a partial substitute for granting appellants the option of discretionary review. Appeals courts today often employ procedures to winnow out and curtail their treatment of cases, so that only a subset are accorded full, plenary consideration.<sup>77</sup> Such screening practices embed within the appeals process a type of discretionary review and reflect its cost-saving advantages for courts.

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<sup>77</sup> See, for example, Commission on Structural Alternatives (1998, p. 70), stating that “appellate courts have adopted screening and tracking procedures through which a large proportion of appeals are decided by the court without oral argument and by judgment orders or unelaborated opinions.” See also Lay (1981, pp. 1153-55), Judicial Conference of the United States (1995, ch. 2, p. 11), and Posner (1996, ch. 10).



However, this implicit discretionary review that now occurs does not appear to lower brief-writing costs for *litigants* – for the simple reason that litigants have to submit their full written arguments *before* appeals court considerations. In contrast, under explicit discretionary review, litigants would submit their full written arguments only if they were granted leave to appeal. Thus, although implicit discretionary review may reduce costs for courts and save litigants from the task of making oral argument, it does not save litigants expenses in regard to the preparation of written work.<sup>78</sup>

Another limitation of implicit discretionary review is that the more abbreviated and rigorous it is, the more likely it is to be resisted as a subversion of a full appeals consideration.<sup>79</sup> Hence, the screening of cases that is feasible under a chosen option of discretionary review could be more effective than that occurring as part of the full appeals process.

The factors I have just reviewed, together with the two main advantages concerning reducing the number of direct appeals now brought and fostering discretionary review among cases not now appealed, suggest to me that adding the right of discretionary review to the right of appeal could well have a significant socially beneficial effect.

This change in the design of the appeals process also has the advantage that it would presumably be seen as fair: it would only be offering a new option to litigants, not

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<sup>78</sup> It has been remarked to me that one could imagine a process of implicit discretionary, different from our own, in which litigants would be allowed to amplify their initial submissions after screening by the appeals court. But such a process would be tantamount to discretionary review.

<sup>79</sup> For expressions of this view, see, for example, Baker (1994a, pp. 922-23; Baker 1994b, pp. 106-50), Carrington (1987, p. 429), Reinhardt (1995, pp. 1509-12), and Vitiello (1988, pp. 444-46). An instance of note reflecting the view in question in a civil law country is that a screening process of the German Supreme Court was struck down on the ground that it interfered with the constitutional right to a full appeals consideration; see Herzog and Karlen (1982, pp. 56-57).

interfering with their right to bring appeals. All proposals that I have seen recommending discretionary review have been as a *substitute* for the right of appeal, so have meant denying that right to appellants.<sup>80</sup> That has been a stumbling block to the use of discretionary review in the United States and has been a virtual bar to its use in many civil law countries, where the right of appeal (even at supreme courts) tends to be constitutionally guaranteed.<sup>81</sup> Happily, it turns out that on grounds of functionality, it is in broad circumstances not desirable to substitute discretionary review for the right of appeal but rather to offer discretionary review as a choice for appellants.

A reader might wonder why, if the proposal to allow appellants the option of discretionary review could be socially advantageous, it has not been considered before. My surmise is that commentators have overlooked the point that appellants themselves might prefer discretionary review over direct appeal in order to save expense. Hence, in the contemplation of commentators, discretionary review has had to replace appeal as of right in order to be employed.

*Why adding the right of direct appeal at supreme courts where there is now only discretionary review might be socially undesirable.* Let me now consider what would occur if a right of appeal were added to the right to obtain discretionary review at supreme courts where, as at the U.S. Supreme Court and some state supreme courts,

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<sup>80</sup> As I mentioned earlier, Justice William Rehnquist suggested replacing direct appeal with discretionary review in the federal district courts; see Greenhouse (1984). See also, for example, Federal Courts Study Committee (1990, p. 124), Judicial Conference of the United States (1995, ch. 10), and Lay (1981).

<sup>81</sup> On resistance to the use of discretionary review as a substitute for appeal as of right, see the sources cited in note 79 *supra*.

appeals are subject to discretionary review.<sup>82</sup> Recall from Section 2.5 that the social advantage of adding the right of direct appeal is that it would enable appellants who have information indicating that they are relatively likely to succeed to bypass discretionary review, saving themselves and society the extra expense of discretionary review. Accordingly, on the basis of the theory of Sections 2 and 3, it might appear that I should recommend that the right of appeal supplement the right of discretionary review at the supreme courts under discussion.

However, two considerations suggest otherwise. First, the cost-saving advantage of adding the right of direct appeal is probably small as an empirical matter. Not only are the costs of a discretionary review relatively low, but also, as I discussed several paragraphs above, they are to an important extent costs that would not be saved because they are for efforts that would otherwise be borne in an appeal. Much of the time that the appeals court would spend in a discretionary appeal learning the basic facts of the case and the main reasons for the appeal would not be saved if there were no discretionary review; this time would largely be spent in any event in an appeals consideration.

Second, there is a disadvantage of allowing direct appeal that seems of particular importance at the level of supreme courts. Supreme court decisions often make new law, harmonize conflicting lower court decisions, or otherwise usefully clarify the law, and thereby benefit many parties in the future. These social benefits of supreme court decisions are not ordinarily part of the private calculus of appellants and thus might lead them to opt for an appeal even though the social benefits of a decision do not merit the supreme court's attention. Further, appellants' incentives to ask for direct appeal when

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<sup>82</sup> To be clear, and as I said several paragraphs above, at supreme courts where appeal is as of right, my recommendation is that discretionary review be given as an option to appellants.

not socially justified would be exacerbated by their prediction that their cases would be rejected for an appeals consideration under discretionary review just because their cases would be viewed as not being appropriate for supreme court consideration.

Hence, the disadvantage of allowing direct appeal to the supreme court might well outweigh the probably limited cost-saving advantage, and thus the theory of Section 2 does not indicate that appellants ought to be given a choice between discretionary review and appeal to supreme courts. This conclusion is, of course, not inconsistent with the result of Section 2.2 that allowing choice is best, for that result presumed, among other things, that appellants value appeals court outcomes in the way society does (*or* that corrective policies are employed – see immediately below), but that this assumption does not hold is precisely the problem that I just suggested can be significant in supreme court adjudication.

## 5.2 Aligning Private and Social Incentives With Fees for Bringing Appeals and Payments Based on Reversals

In the previous subsection, I asked whether allowing appellants the choice between discretionary review and direct appeal would be desirable, given the possibility that the incentives to make use of discretionary review and of appeal would deviate from the socially appropriate incentives to do so. Here I consider whether private and social incentives can be brought into alignment. I explained in Sections 2.4 and 3.3 that private and social incentives can be made identical in theory with the suitable imposition of fees for using the appeals process and with payment schemes based on the occurrence of reversals. I now discuss the feasibility and interpretation of such fees and payment

schemes, first with respect to appellants and then with respect to appeals courts themselves.

*Appellants.* One reason that private and social incentives to employ the appeals process differ is that appellants bear less than the full social costs of the process. To correct that problem, I observed above that appellants should pay a fee (for either discretionary review or for appeal) equal to the sum of the appeals court's cost and the appellee's costs of defense. This fee would reduce the use of the appeals system in a desirable way, other things being equal.

Would implementation of proper fees be likely to be helpful and would it be practical? Presently, fees for making use of the appeals process are modest and do not reflect the true expenses of appeals courts and of appellees.<sup>83</sup> Even crude estimates of court and appellee expenditures should therefore result in fees significantly higher than those now imposed on appellants. Hence, it seems that it would not be difficult to impose fees that would significantly affect the use of the appeals process in a generally desirable manner.

The second reason for misalignment between private and social incentives to employ the appeals process is that private evaluations of appeals court outcomes may differ from the social. Private assessments are based mainly on the implications of outcomes for appellants, notably, the monetary gains, or damages or criminal sanctions avoided, from reversals. The social evaluation is different. The private gains might not

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<sup>83</sup> The filing fee for an appeal in Federal appeals courts is \$450; see [http://www.uscourts.gov/fedcourtfees/courtappealsfee\\_January2007.pdf](http://www.uscourts.gov/fedcourtfees/courtappealsfee_January2007.pdf) (last visited 9/29/08). The filing fees for states appear comparable. For Massachusetts, for example, the fee is \$300, as reported at <http://www.mass.gov/courts/pdf/supappfeechanges.pdf> (last visited 9/29/08); and for California, the filing fee is \$655, as reported at [http://www.courtinfo.ca.gov/rules/index.cfm?title=eight&linkid=rule8\\_100](http://www.courtinfo.ca.gov/rules/index.cfm?title=eight&linkid=rule8_100) (last visited 9/29/08). These fees are arguably much less than the sum of the costs borne by the courts and by appellees in resolving appeals.

correspond well to social gains, major reasons being that they do not include the beneficial effects of appeals court outcomes on the understanding and clarification of legal rules or on improved trial court judicial decisionmaking.<sup>84</sup> Although in theory the use of appropriate supplemental payments (to appellants if they undervalue reversals, from appellants if they overvalue reversals) could correct deviations between private and social evaluations, this would be difficult to accomplish. It would be hard for a court or other social authority to gauge the effects of appeals court decisions on future behavior.<sup>85</sup> Hence, there may be little practical scope for alleviating divergences between private and social evaluations of appeals court outcomes through payments based on those outcomes.

*Appeals courts.* I also discussed in Section 2 the problem that appeals courts might not have proper incentives to decide socially appropriately whether to hear cases after discretionary review. Assessment and correction of this problem would be a complicated task for two major reasons. First, it would not be easy for a social authority to ascertain when incentive problems exist, for, in contrast to appellants, appeals courts should tend to have the social interest as a principal objective. Second, even if a social authority could identify incentive problems affecting appeals courts, its ability to fashion useful correctives through the use of fees or monetary payments based on appeals court decisions is questionable; appeals court judges are motivated by many factors apart from

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<sup>84</sup> The problem is mitigated to some degree in the United States by the general rule that appeals may be brought primarily over asserted errors in interpreting the law or in applying the law to the found facts, but not ordinarily over asserted errors in assessing the facts; see, for example, James, Hazard, and Leubsdorf (1992, sec. 12.9) and FED. R. CIV. P. 52(a) (“Findings of fact, whether based on oral or other evidence, must not be set aside unless clearly erroneous, and the reviewing court must give due regard to the trial court’s opportunity to judge the witnesses’ credibility.”). The latter type of error is such that the social value of correction is least on average, for its correction would not result in a change in law that could help future parties.

<sup>85</sup> This logic is in some tension with the assumption that appeals courts can estimate the effect of their decisions on social welfare in order to decide, upon discretionary review, whether a full appeal would be socially worthwhile to hold. But when appeals courts make their decisions in discretionary review, they do not have to quantify their assessments of the social value of reversals.

money and tend to make decisions in groups (diluting the incentives for individual judges). In consequence, it seems that society's ability to modify beneficially the behavior of appeals courts through use of the monetary correctives is circumscribed and may be impractical.

## **6. Conclusion**

I have addressed here a basic question about the appeals process, namely, how should discretionary review enter into the design of the appeals process? The general qualitative answer was that no use of discretionary review is best when the appellant's initial likelihood of success is relatively low, that discretionary review is best when this likelihood is in a mid-range, and that direct appeal is best when the likelihood is high. Further, in the ideal, both discretionary review and direct appeal should be available as choices for appellants. The reason was that litigants naturally possess valuable initial information about the likelihood of trial court error, and that this information ought in principle to determine whether the appeals process is employed and, if so, whether discretionary review should be sought.

The conclusion that appellants should be able to choose between discretionary review and direct appeal rested on the assumption, among others, that the incentives of appellants were in alignment with social incentives. In principle, incentive problems can be cured by suitable use of fees for bringing appeals and payment schemes based on appeals court outcomes, but I came to the tentative judgment that, at least payment schemes, are difficult to implement.

In any event, in the absence of the use of correctives for possible differences between social and private incentives to use the appeals process, I considered whether

allowing appellants a choice between appeal and discretionary review would be desirable.

My suggested answer was that appellants be given this choice at the initial level of appeals but not at supreme courts where discretionary review is now employed.



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