

# On the Design of the Appeals Process: The Optimal Use of Discretionary Review versus Direct Appeal

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## ABSTRACT

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 midrange, and that direct appeal should be sought when this likelihood is higher. Further, I emphasize that appellants should often be able to choose between discretionary review and direct appeal, notably because appellants may elect discretionary review to save themselves (and thus 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.

## 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

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would be socially best for appellants to enjoy the right to choose between discretionary review and direct appeal. Then appellants would often elect discretionary review in order to spare themselves the expense of an appeal if their cases are determined to be unpromising. Two social benefits would result: many cases now appealed would be more cheaply and fittingly resolved, for they would end following a negative outcome under discretionary review, and many cases not now appealed would be appropriately appealed, for they would result in discretionary review and would be appealed following a positive outcome.

This often theoretically advantageous design of the appeals process allowing appellant choice differs from reality. As I observe, discretionary review and direct appeal never coexist as options for appellants. That suggests the possible 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 indicate 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 Section 2 of the article, I present the basic analysis of the optimal design of the appeals system employing a stylized model in which social welfare depends positively on the correction of mistaken trial court decisions and negatively on the 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 because the probability-discounted or "expected" benefit from reversal would be less than the cost. But if the probability of reversal exceeds the threshold, the case will be worthwhile considering on appeal. In particular, if the probability of reversal is between the threshold and a second higher threshold, the case should be submitted for discretionary review rather than direct appeal. An essential reason is that 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, however, the appellant's initial probability of reversal exceeds the second threshold, the case should be directly appealed. The primary explanation is that it is likely that discretionary review would result in the granting of a full appeal, which means that the expense of discretionary review will have been needlessly incurred.<sup>1</sup>

1. The magnitudes of the two probability thresholds are determined in the model; they

Because the socially desirable manner of resolving cases depends on the appellant's initial probability of success, it must be 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 itself 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.

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,

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depend on the costs of discretionary review, the costs of appeal, and the social value of reversals.

2. 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 giving these litigants the right to initiate appeals allows society to exploit their information—it focuses higher court reconsideration on cases in which legal error was most likely to have occurred. See Shavell (1995) for a development of this rationale.

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, notably, the imposition of fees for use of the appeals process and the use of payments based on the outcome of appeals. I then examine a number of extensions to the model, including the following: 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, the ability of appellants to alter the character of their legal effort on the basis of the outcome of discretionary review, and the possibility that a request for discretionary review would signal to the court that the appellant was uncertain about success.

In Section 3, 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 4, 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 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).

3. 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.

It is also 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 could be socially beneficial. The attraction of allowing appellants at the first level of appeals courts the option of discretionary review may also hold for 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 such a change would probably be undesirable. Among the reasons I mention 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; 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 the 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 note that I build in this article on well-appreciated ideas about the value of information<sup>4</sup> and, more particularly, on insightful informal observations from prior writing on appeals, especially that comparing or proposing discretionary review as an alternative to direct appeal, for example, Baker (1994a), Dalton (1985), Lay

4. That information relevant to a subsequent decision—and thus information provided by discretionary review—has value and ought to be obtained if its value exceeds its cost is a standard point of decision theory; see, for example, the classic reference (Raiffa 1968, pp. 27–33). Two specific issues about the value of information from discretionary review are developed here. The first is that the value of information from discretionary review, and thus its optimality, depends on an important factor that varies with the case, namely, the appellant's initial probability of reversal, and I characterize how so. The second is that the cost and value of the information to the appellant is different from its social cost and social value, and I examine the implications of this problem as well as policies that can ameliorate it.

(1981), and Justice William Rehnquist.<sup>5</sup> I also make use of empirical findings about the appeals process, on which see especially research by Theodore Eisenberg and coauthors (Eisenberg 2004; Eisenberg and Heise 2008; and Eisenberg and Miller 2008) and certain governmental sources.<sup>6</sup> The chief contribution of the present article is that, to my knowledge, it is the first to examine the optimal use of discretionary review and direct appeal in a general model of the appeals process and to state that it may be advantageous to give litigants the right to choose between discretionary review and direct appeal.<sup>7</sup>

## 2. BASIC THEORY

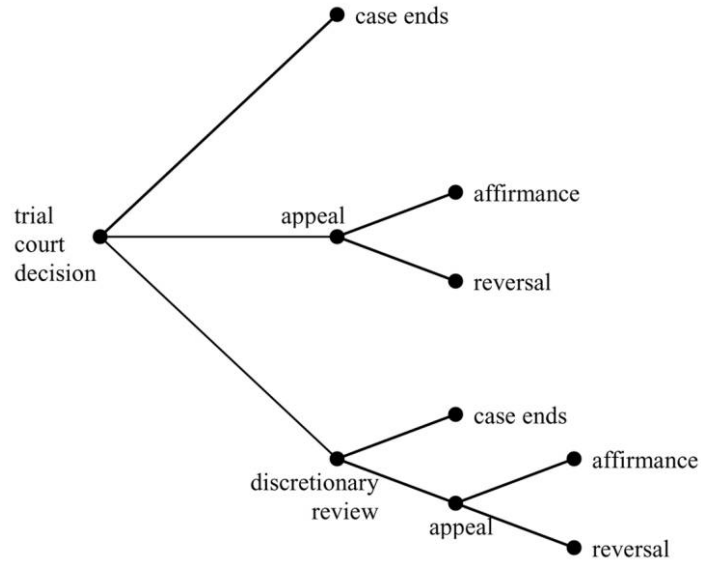
I set out here a stylized model of the appeals process in order to clarify the analysis of its design and functioning.<sup>8</sup> I assume that there is a trial court and an appeals court. The appeals court can reconsider trial court decisions and has higher authority than the trial court. After a trial court decision, 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

5. Justice 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. 234–38), 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).

6. The Statistics Division of the Administrative Office of the U.S. Courts collects and publishes statistics on the federal courts; see Administrative Office of the U.S. Courts, Statistical Reports (<http://www.uscourts.gov/library/statisticalreports.html>). For state courts, see National Center for State Courts, Court Statistics Project ([http://www.ncsconline.org/D\\_Research/csp/CSP\\_Main\\_Page.html](http://www.ncsconline.org/D_Research/csp/CSP_Main_Page.html)). 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, 2008b).

7. A number of articles contain economic or political-science-oriented theoretical analyses of either direct appeal or discretionary review (some focusing on error correction, others on different issues), but they do not compare direct appeal and discretionary review. See Cameron and Kornhauser (2005, 2006), Daughety and Reinganum (2000), Kornhauser (1995), Levy (2005), and Shavell (1995, 2006), which deal mainly with direct appeal, and Daughety and Reinganum (2006), Lax (2003), Cameron, Segal, and Songer (2000), and Spitzer and Talley (2000), which address mainly discretionary review.

8. A formal version of the model is presented in the Appendix. A more complete version of this Appendix is presented in Section 3 of Shavell (2009).



**Figure 1.** Stylized model of the appeals process

proceeding, which results in a decision either to end the case or to conduct an appeals proceeding.<sup>9</sup> This is portrayed in Figure 1.

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>10</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>11</sup>

An appeals proceeding involves costs comprising the legal and other

9. 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.

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

11. I relax this assumption in Section 2.4, where I discuss the possibility that the appeals court might not obtain superior information when it undertakes a discretionary review.

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.

In addition, 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 so on. I also assume that affirmances do not generate social benefits, as they do not change trial court decisions.<sup>12</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 tend to be socially good and that the costs of the appeals process represent a social detriment.<sup>13</sup>

### 2.1. 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 (their self-interested behavior is addressed in Section 2.2). Specifically, I claim that socially best behavior has the following general description: if the appellant's probability of reversal is less than a first threshold probability, the appellant's case should end without use of discretionary review or appeal; if the probability of reversal 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 exceeds the second threshold, the case should be directly considered in an appeal.<sup>14</sup> Because socially best behavior depends on the appellant's probability assessment, it is the appellant who must decide on the course of action.

12. I discuss the effect of the assumption that affirmances may have social value in Section 2.4.

13. Let me note that I examined essentially the same measure of social welfare in Shavell (1995). Because I did not consider discretionary review in that article, there was no opportunity to improve social welfare by winnowing out cases unlikely to be reversed. I note as well that the model studied there is consistent with the one studied here, for in the previous article the probability of reversal of a mistaken trial court decision was generally presumed to be less than one, which means that there was a potential role for discretionary review to improve information about the outcome of an appeal.

14. 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 the Appendix.



Let me illustrate this claim with a numerical example involving the following assumptions. The social costs of an appeal are \$100,000, the social costs of a discretionary review are \$20,000, the social value of a reversal is \$250,000, and the appellant's initial prospect of success, that is, of reversal, varies depending on the case.

Further, 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 that the likelihood of reversal is only 10 percent and good news means that the likelihood of reversal is 90 percent. 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 percent, consistency requires that the probability-weighted average of bad news and of good news equals 15 percent. This will be true if the probability of bad news is 93.75 percent and that of good news is 6.25 percent, for then the expected probability will be 93.75 percent  $\times$  10 percent + 6.25 percent  $\times$  90 percent = 15 percent. Similarly, if the initial probability of success is 25 percent, then the probability of bad news must be 81.25 percent and that of good news 18.75 percent, for 81.25 percent  $\times$  10 percent + 18.75 percent  $\times$  90 percent = 25 percent.<sup>15</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 percent. Clearly, direct appeal is not worthwhile, for the expected social benefit from appeal would be 15 percent  $\times$  \$250,000 = \$37,500, whereas the cost would be \$100,000.<sup>16</sup>

Is discretionary review worthwhile when the appellant's prospect of

15. 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  $q = .1p + .9(1 - p)$ , 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 values of  $q$  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 the Appendix, there is a specification of probabilities of reversal after discretionary review given any  $q$ .

16. 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 is \$1,000,000, then the expected benefit from appeal would be \$150,000, and direct appeal would be socially desirable.

success is 15 percent? 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 percent chance of success has an expected value of 10 percent  $\times$  \$250,000 = \$25,000, which is less than its cost of \$100,000.<sup>17</sup> If discretionary review would result in good news, however, it would be worthwhile holding an appeal, for an appeal with a 90 percent chance of success has an expected value of 90 percent  $\times$  \$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 percent. That means, recall, that the probability of bad news is 93.75 percent and the probability of good news is 6.25 percent. This in turn means that the expected payoff from discretionary review is 6.25 percent  $\times$  \$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.

If, however, the initial likelihood of success exceeds a threshold, which here turns out to be 23 percent, then discretionary review will be desirable.<sup>18</sup> For instance, suppose that the likelihood of reversal is 30 percent. This implies that the probability of bad news is 75 percent and the probability of good news is 25 percent.<sup>19</sup> Hence, the expected value of discretionary review is 25 percent  $\times$  \$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 percent  $\times$  \$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,

17. 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 justifies its decision, it might well not make direct reference to the probability of success on full appeal.

18. 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  $q = .228$ .

19. From note 15,  $p = (.9 - q)/.8$ , and here  $q$  is .3. Hence,  $p = .6/.8 = .75$ . Observe too that  $.75 \times .1 + .25 \times .9 = .3$ .

as we just saw was true when the initial likelihood was 30 percent, 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 percent. Then direct appeal would be worthwhile bringing were it the only option, for it would yield a return of 50 percent  $\times$  \$250,000 = \$125,000 at a cost of \$100,000 and so involve a net benefit of \$25,000. Discretionary review would be better than direct appeal, however. To see this, note that a 50 percent probability of success implies that the probabilities of bad news and of good news are each 50 percent.<sup>20</sup> Hence, the expected value of discretionary review is 50 percent  $\times$  \$125,000 = \$62,500, so 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 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.

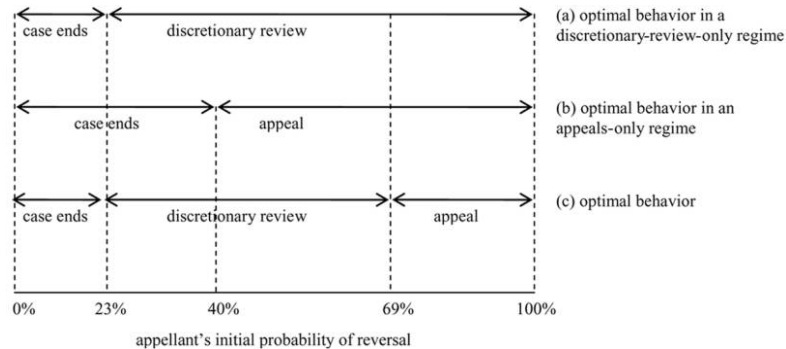
Direct appeal becomes superior to discretionary review if the initial prospect of success exceeds a second threshold, which in this example is 69 percent.<sup>21</sup> For example, if the initial probability of reversal is 80 percent, then appeal would yield a net benefit of 80 percent  $\times$  \$250,000 – \$100,000 = \$100,000. Because an 80 percent probability of reversal implies that the likelihood of good news is 87.5 percent,<sup>22</sup> the net value of discretionary review is 87.5 percent  $\times$  \$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 percent, it is best for the case to terminate; if the probability is between 23 and 69 percent, it is best for discretionary review to be employed; and if the probability exceeds 69 percent, it is best for a direct appeal to be made. This is portrayed in line *c* of Figure 2. Note that 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

20. From the formula  $p = (.9 - q)/.8$  and  $q = .5$ , I obtain  $p = .4/.8 = .5$ .

21. To determine the threshold, I 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*, I obtain 68.67 percent.

22. From  $p = (.9 - q)/.8$  and  $q = .8$ , I obtain  $p = .1/.8 = .125$ .



**Figure 2.** Optimal behavior under different appeals regimes

if and only if  $p \times \$250,000$  exceeds  $\$100,000$ , which is to say, when  $p$  exceeds 40 percent. This is shown in line *b* of Figure 2. There are then two differences in outcome from the socially best situation, which are displayed in line *c* of Figure 2. First, cases in which the chances of reversal are between 23 and 40 percent are not appealed, whereas it would have been desirable to hear these cases 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. 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 percent, the expected value of discretionary review is 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 percent 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 percent, 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 as a result of 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 percent, there will be discretionary review, whereas in the optimal system there would be direct appeal. For example, when the chance of success is 80 percent, 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.

## 2.2. 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.

**2.2.1. 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 of the appeals courts.<sup>23</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 my 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 percent, as  $16 \text{ percent} \times \$250,000 = \$40,000$ , whereas it is socially desirable to bring an appeal only when the probability exceeds 40 percent, as  $40 \text{ percent} \times \$250,000 = \$100,000$ .

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

23. Except to the extent that they might have to pay a fee for making an appeal, a factor that I will for the present assume is absent. On such fees, which tend to be nominal, see Section 4.2.

percent). 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 review may be socially excessive.<sup>24</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 decision making—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 would exert only a 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 an appeal—therefore counteracting the excessive incentive due to the disparity between private and social costs. 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 exacerbating the excessive incentive to bring appeals due to the difference between private and social costs.

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

24. 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.

would not be an appeal. Then if the appellant's value of a reversal is less than 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, however, 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 value, the value of discretionary review might exceed the social value.<sup>25</sup>

**2.2.2. Appeals Courts' 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 means that an appeal ought to be undertaken when there is good news, for the expected benefit would then be 90 percent  $\times$  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 percent  $\times$  \$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.

### 2.3. Social Policy in Light of Incentive Problems

Now that I have discussed the differences between the socially ideal behavior of the 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.

**2.3.1. 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>26</sup> But the circumstances under which that would be so are somewhat special. Their nature can be understood from

25. 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.

26. In the Appendix, 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.

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 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, however, 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 from the private-cost bias, making discretionary review and appeal less expensive to appellants than it is socially, or from appellants valuing reversal more highly than society does.



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 leads 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 adding 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 how we did 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 they want appeal more often than appeals courts would grant it. These two circumstances would also 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 the conclusion 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 with a regime of direct appeals only.

**2.3.2. 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 it would be best to employ the regime in which there is a choice between discretionary review and appeal.

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 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 improve the 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. The latter information might be especially 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.

#### **2.4. Modifications of the Model**

*The Possibility That Expenditures on Discretionary Review Reduce the Cost of a Subsequent Appeal.* I assumed for simplicity in the model 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. This factor should raise the social value of discretionary review relative to appeal.

*The Possibility That Expenditures on Appeal May Be Guided by What Is Learned from Discretionary Review.* Another consideration omitted from the model is that a discretionary review may reveal to the litigants which issues will be important in an appeal. Hence, greater expenditures can be directed toward these issues and less toward others. Such socially beneficial modifications in expenditures cannot be made in the absence of discretionary review.

*The Possibility That a Request for Discretionary Review Would Signal to the Court That the Appellant Is Uncertain about Success.* Account was not taken in the model of the rational inference of appeals courts that appellants who elect discretionary review believe their cases to be less likely to succeed than those who request appeal. It is possible, however, that such a negative inference would have no influence on the analysis. Suppose that the information (say, about a mistaken interpretation of a precedent by the trial court) on 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 rendered moot. Its initial inference would merely be validated by what it would learn in its discretionary review (it would learn that the appellant's argument that the trial court erred in its interpretation of a precedent was weak).

Suppose, on the other hand, that some of the information on which the appellant based his or her estimate of reversal would not be presented to the appeals court in its discretionary review (owing to constraints such as on the length of briefs). Then the inference from the fact that the appellant chose discretionary review would be relevant, for it would not be merely validated by the discretionary review. If the negative signaling effect of having brought discretionary review would undesirably discourage the use of discretionary review, that could be countered by lowering the fee for discretionary review or by allowing greater presentation of evidence in the discretionary review.

*The Mitigation of Excessive Appeal Due to Attorney Self-Interest under Discretionary Review.* Attorneys have a personal interest in making appeals, as that means more work for them, which suggests 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 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 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 that it is predicting its own behavior. Nevertheless, an appellant could have a better assessment of the outcome of an appeal than the court would 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 he or she believes would be persuasive to the appeals court but that he or she would not have the opportunity to develop at the stage of discretionary review. Such a possibility could be taken into account, but the main qualitative conclusion of this article—that it is best for appellants to make the choice between discretionary review and direct appeal—would continue to hold.

*The Possibility of Settlement.* 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>27</sup> This constitutes an argument favoring discretionary review, assuming that settlement is socially desirable.

*The Possibility That Affirmances Have Positive Social Value.* Although I assumed that an affirmance has no social value because it does not change the outcome of a case, an affirmance might have social significance because it clarifies the law. To that degree, appellant behavior will tend to be distorted from socially ideal behavior. 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

27. 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.

to be scant? Second, appellant incentives to choose discretionary review rather than appeal might be too low.<sup>28</sup>

### 2.5. Conclusion

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 depends 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. 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>29</sup> and in many

28. 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.

29. 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 (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 IRS.gov, Appeals . . . Resolving Tax Disputes (<http://www.irs.gov/individuals/content/0,,id=98196,00.html>) regarding the Internal Revenue Service, and Koch and Koplow (1990), Mashaw et al. (1978), and Social Security Administration, Information about Social Security's Hearings and Appeals Process (<http://www.socialsecurity.gov/appeals/>) regarding the Social Security Administration.

private adjudicative systems (such as those of employers, religious bodies, and trade associations) the same is true.<sup>30</sup>

Specifically, litigants ordinarily possess the right to have appeals heard at the first level of appeal.<sup>31</sup> They typically also have recourse to a second level of appeal, usually to a supreme court. At the U.S. Supreme Court, appeals are subject to discretionary review;<sup>32</sup> in state supreme courts, appeals are more often subject to discretionary review than not, but their status is very much mixed.<sup>33</sup> In other common-law countries, appeal to the supreme court tends to be discretionary (see Herzog and Karlen 1982, p. 54; Platto 1992). In the supreme courts of civil law countries, appeals are generally not subject to discretionary review, but the categories of cases for which appeals may be brought are usually restricted (see Herzog and Karlen 1982, pp. 54–57; Platto 1992).

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

30. See, for example, Scott (1965, ch. 3) on employers, Coriden et al. (1985, pp. 1000–1002) on the Catholic Church, and Cocoa Merchants' Association of America (2008) on a trade association. However, appeal rights are to my knowledge not ordinarily a feature of private arbitration.

31. 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. 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, the state court structure charts in Stickland, Bromage, and Raftery (2007). On the right of appeal at the first level in administrative agencies, see, for example, IRS.gov, Six Important Facts about Your Appeal Rights (<http://www.irs.gov/newsroom/article/0,,id=108768,00.html>) on the Internal Revenue Service, and Social Security Administration, The Appeals Process (<http://www.ssa.gov/pubs/10041.html>) on the Social Security Administration. On the right of appeal in private judicial systems, see, for example, Scott (1965, p. 78) on employers, Cocoa Merchants' Association of America (2008, rule 8[b]) on the Cocoa Merchants' Association of America, and Coriden, Green, and Heintschel (1985, pp. 953–59) on the Catholic Church.

32. The discretionary authority of the U.S. 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. sec. 1257).

33. Stickland, Bromage, and Raftery (2007, p. 152) report that in 21 state supreme courts surveyed, 58,258 discretionary jurisdiction petitions 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 case. On the jurisdiction of state supreme courts, see the detailed charts in Stickland, Bromage, and Raftery (2007, pp. 16–67) and, for example, Flango and Rottman (1998, pp. 13–17) and Eisenberg and Miller (2008).

designed in the manner that may well be socially desirable, as explained 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>34</sup> and the volume of appeals in major civil law countries is comparable.<sup>35</sup> The rate of the filing of appeals in the U.S. federal courts is about 11 percent of trial court cases filed and about 41 percent of cases that resulted in a judgment; the rate in state courts is lower.<sup>36</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 percent.<sup>37</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 percent of federal appellate judges are appeals court judges (that is, only 5 percent are Supreme Court justices), and 79 percent of state appellate judges are

34. The number of appeals filed in federal courts was 66,618 in 2006 and 58,410 in 2007; see Administrative Office of the U.S. Courts (2008, p. 13). The number of appeals filed in state courts was approximately 280,000 in 2005; see LaFountain et al. (2007, p. 68).

35. 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 37 and 40) 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, 2008b).

36. See Eisenberg (2004, p. 664), who carefully examined federal case statistics over the period 1987–96. The rate of the filing of appeals in state courts is lower than in federal courts, as Eisenberg and Heise (2008, sec. 4.1) note. 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 34), the overall rate is less than 1 percent, 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. sec. 1291 grants federal courts of appeal “jurisdiction of appeals from all final decisions of the district courts.” Nonfinal, or interlocutory, appeals are available only in limited circumstances. See 28 U.S.C. sec. 1292; see also *Catlin v. United States*, 324 U.S. 229, 233–34 (1945), which explains the rationale for the final judgment rule.

37. In France in 2004, the average appeals rate was 15.1 percent (Ministère de la Justice 2007); in Spain in 2007, the rate was 26.5 percent (Consejo General del Poder Judicial 2008); and in Germany in 2006, the rate was 18.3 percent (Statistisches Bundesamt 2008a, 2008b).

appeals court judges.<sup>38</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 U.S. federal courts, the reversal rate for cases that must be heard is about 20 percent, whereas the reversal rate for Supreme Court cases is over 70 percent (see Eisenberg and Miller 2008, p. 8); in state courts, a study shows that the reversal rate for cases that must be heard is about 28 percent, whereas the rate for cases under discretionary review is 52 percent (see Eisenberg and Miller 2008, p. 15).<sup>39</sup> In major civil law countries, key reversal rates for cases that must be heard range from 18 to 52 percent;<sup>40</sup> there are no reversal rates for discretionary review, as that regime essentially does not exist.

#### **4. THE POTENTIAL ADVANTAGES OF MODIFICATION OF THE OBSERVED APPEALS PROCESS**

##### **4.1. Allowing Appellants to Choose between Discretionary Review and Direct Appeal**

As I noted in Section 3, the appeals processes that we observe do not permit appellants to choose between discretionary review and appeal, even though, as demonstrated in Section 2, 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

38. In federal courts there were 167 authorized appeals court judges in 2007 and nine Supreme Court justices, and  $167/176 = 94.9$  percent; see Administrative Office of the U.S. Courts (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  $1,027/1,297 = 79.2$  percent; see Stickland, Bromage, and Raftery (2007, pp. 165–69).

39. Eisenberg and Miller (2008, p. 15) 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.

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



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.

**4.1.1. 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>41</sup>

First, many of the approximately 220,000 cases now appealed annually that are as of right would be submitted for discretionary review.<sup>42</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 whether 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 would 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>43</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 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

41. This discussion parallels my remarks at the end of Section 2.1 on the social advantages of adding a right of discretionary review to a system with only a right of direct appeal.

42. The number of cases filed at federal appeals courts has been in the neighborhood of 60,000 in recent years; see Administrative Office of the U.S. Courts (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 Stickland, Bromage, and Raftery (2007, p. 152).

43. Lay (1981, pp. 1155–56), for example, envisions a simple process in which petitions for discretionary review would be limited to 10 pages and appellees would be allowed to submit objections to a petition for appeal only if requested to do so by the appeals court. See also the discussion of the possible contours of discretionary review in Baker (1994a, pp. 919–23).

predicting its own behavior, it is natural to conjecture that the decision of the appeals court about granting an appeal would often 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 of 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 percent of the time,<sup>44</sup> a perfect discretionary review process would result in decisions to hear appeals 25 percent of the time, when the appeals would definitely succeed, and in denial to hear appeals 75 percent 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 percent of the time. It follows that appellants would find the perfect discretionary review attractive if its cost were less than 75 percent 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 70 percent of the time<sup>45</sup> and that when it results in termination of the case an appeal would have succeeded only 15 percent of the time. Then one can show that a discretionary review would lead to an appeal with a probability of 18 percent,<sup>46</sup> saving appellants the cost of a full appeal 82 percent of the time, which suggests that they would often find discretionary review attractive.

In view of the preceding discussion, it seems plausible that a large fraction of the 220,000 parties who now bring direct appeals would

44. Recall from above that first-level appeals succeed about 20 percent of the time in federal courts and that mandatory jurisdiction appeals succeed about 28 percent of the time in state courts.

45. Although 70 percent is only illustrative, it is not unlikely; the rate of success of appeals following discretionary review is over 70 percent for the U.S. Supreme Court, as I noted above, and is reported by Eisenberg and Miller (2008, p. 16) to be 70 percent or higher for at least seven states.

46. In particular, I am assuming that a discretionary review would result in either a promising evaluation—meaning a 70 percent likelihood of success and a decision of the court to go forward with an appeal—or an unpromising evaluation—meaning a 15 percent likelihood of success and a decision to terminate. Let  $p$  be the probability of a promising evaluation. Then  $p$  must satisfy  $.7p + .15(1 - p) = .25$  because 25 percent is the probability of success in direct appeals. Solving, I obtain  $p = .18$ .

instead elect discretionary review were that an option. Suppose that three-quarters of these appellants, that is, 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 18 percent as just explained. Then the number of appeals would fall from 220,000 to 84,700, which is made up of 55,000 appellants who would still make direct appeals and of  $18 \text{ percent} \times 165,000$ , or 29,700, 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 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 the cases would often be doing so for a good reason, namely, the identification at a relatively low social cost of cases in which 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 2.4, 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>47</sup> Of course, discretionary review may not lead to an appeal, so 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-dollar reduction in its expense because there will be some tendency of judges to forget what they learned in a discretionary review and 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>48</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 of cases after appeals are filed often occurs,<sup>49</sup> so an enhanced settlement rate on account of discretionary review might have more than theoretical importance.

47. For example, Baker (1994a, p. 920) states that proponents of discretionary view believe that “[j]udicial 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.”

48. 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 “[t]he 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.”

49. Eisenberg and Heise (2008, p. 26) present statistics showing that 42.5 percent of appeals that are filed in federal court are not completed and that 56.7 percent of those filed in state courts are not completed. Many of these appeals dropouts are probably settled.

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 percent of appeals fail, one suspects that many clients would press their attorneys to do so. There is, however, 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 of discretionary review might be thought unattractive for appellants who cannot afford to pay for legal services and are provided services gratis.<sup>50</sup> For such appellants, the fact that discretionary review would be cheaper than direct appeal might be considered irrelevant, so 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 review, reasoning that he or 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 its 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

50. In the United States, criminal defendants accused of felonies are generally guaranteed counsel under the Sixth Amendment (see U.S. Const. amend. VI, and *Gideon v. Wainwright*, 372 U.S. 335, 342 [1963]). This right has been interpreted to extend to appeals (see *Penon 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).

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>51</sup> Such screening practices embed within the appeals process a type of discretionary review and reflect its cost-saving advantages for courts.

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 arguments, it does not save litigants expenses in regard to the preparation of written work.<sup>52</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>53</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

51. 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, p. 11), and Posner (1996, ch. 10).

52. It has been remarked to me that one could imagine a process of implicit discretionary review, different from our own, in which litigants would be allowed to amplify their initial submissions after screening by the appeals court. Such a process would be tantamount to mandatory discretionary review.

53. For expressions of this view, see, for example, Baker (1994a, pp. 922–23; 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).

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 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 and so have meant denying that right to appellants.<sup>54</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>55</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.

**4.1.2. 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, appeals are subject to discretionary review.<sup>56</sup> Recall from Section 2.4 that the social advantage of adding the right of direct appeal is that it would enable appellants who have information that indicates 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

54. As I mentioned earlier, Justice 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).

55. On resistance to the use of discretionary review as a substitute for appeal as of right, see the sources cited in note 53.

56. To be clear, at supreme courts where appeal is as of right, my recommendation is that discretionary review be given as an option to appellants.

the theory of Section 2, 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 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 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 2.1 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), but that this assumption does not hold is precisely the problem that I just suggested can be significant in supreme court adjudication.

#### **4.2. Aligning Private and Social Incentives**

In Section 4.1.2, I asked whether allowing appellants the choice between discretionary review and direct appeal would be desirable, given the



possibility that the private 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 practically be brought into alignment, as discussed in Section 2.3.

**4.2.1. 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 that appellants should pay a fee equal to the sum of the appeals court's costs and the appellee's costs of defense. 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>57</sup> Even crude estimates of court and appellee expenditures should therefore result in fees that are 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. These private gains might not correspond well to social gains, the 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 decision making. 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, it would be hard for a social authority to gauge the effects of appeals court decisions on future behavior. Hence, there may be little practical scope for use of corrective payment schemes.

**4.2.2. Appeals Courts.** I also discussed in Section 2 the problem that

57. The filing fee for an appeal in federal appeals courts is \$450; see Administrative Office of the U.S. Courts, Court of Appeals Miscellaneous Fee Schedule ([http://www.uscourts.gov/fedcourtfess/courtappealsfee\\_January2007.pdf](http://www.uscourts.gov/fedcourtfess/courtappealsfee_January2007.pdf)). The filing fees for states appear comparable. For Massachusetts, for example, the fee is \$300 (Administrative Office of the Trial Court, Supreme Judicial Court—Appeals Court [<http://www.mass.gov/courts/pdf/supappfeechanges.pdf>]), and for California, the filing fee is \$655 (Judicial Council of California, 2010 California Rules of Court [[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)]). These fees are arguably much less than the sum of the costs borne by the courts and by appellees in resolving appeals.

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 money and tend to make decisions in groups (diluting the incentives for individual judges).

## 5. CONCLUSION

I have addressed here a basic question about the appeals process, namely, what should be the role of discretionary review? The general qualitative answer was that no use of discretionary review is socially best when the appellant's initial likelihood of success is relatively low, that discretionary review is best when this likelihood is in a midrange, 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 (whereas appeals courts have none unless they engage at least in discretionary review) and that this information ought in principle to determine whether and how the appeals process is employed.

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 are 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.

Finally, let me observe that the analysis of the appeals process developed here applies to a degree to other judicial proceedings. For almost any judicial proceeding short of final judgment, the question may be asked, does the information that it would provide that is relevant to the continuation of the trial make it a socially worthwhile undertaking? Where litigants have superior information to courts about the value of a proceeding and where the divergence between private and social costs and values is not significant, allowing litigants to elect whether to have the proceeding would be desirable, but not otherwise.

#### APPENDIX

The assumptions are as discussed in Section 2. Define the following costs:<sup>58</sup>

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

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

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

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

After a trial court 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 discretionary review, the appeals court knows only the distribution  $f$ . If there is a discretionary review, the court's information about reversal will be superior to the appellant's, and it will formulate a refined probability of reversal. Let

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

$h(p|q)$  = 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 distribution functions  $H(\cdot|q)$  converge in distribution to  $H(\cdot|q_0)$  as  $q \rightarrow q_0$  for any  $q_0$  in  $[0, 1]$ . We know that

$$q = \int_0^1 ph(p|q)dp \quad (\text{A1})$$

for  $q$  in  $(0, 1)$ . Note also that if  $q$  equals zero,  $p$  must be zero, and if  $q$  equals one,  $p$  must be one. Suppose that for any  $q_2 > q_1$ , the random variable  $p|q_2$  stochastically dominates  $p|q_1$ ; for any  $y$  in  $(0, 1)$ ,  $[1 - H(y|q_2)] > [1 - H(y|q_1)]$ .

58. 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).

Suppose that a reversal of a trial court decision leads to a social gain (because appeals courts have an ability to detect errors in legal decisions). Let

$g_s$  = 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

$$\beta_a + \beta_c < g_s, \quad (\text{A2})$$

which means that an appeal will be socially worthwhile to hold when it is certain to succeed.<sup>59</sup>

#### A1. Socially Optimal Behavior

A court that holds a discretionary review should have an appeal when<sup>60</sup>

$$pg_s \geq \beta_a + \beta_c \quad \text{or when} \quad p \geq (\beta_a + \beta_c)/g_s = t^*. \quad (\text{A3})$$

Thus, the expected value of discretionary review (gross of its costs,  $\alpha_a + \alpha_c$ ) as a function of  $q$  is given by

$$\begin{aligned} D(0) &= 0, \\ D(q) &= \int_{t^*}^1 [pg_s - (\beta_a + \beta_c)]h(p|q)dp \quad \text{for } q \text{ in } (0, 1), \\ D(1) &= g_s - (\beta_a + \beta_c). \end{aligned} \quad (\text{A4})$$

In particular, when  $q$  equals zero,  $p$  will definitely be zero, 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  $q$  equals one,  $p$  will definitely be one, so an appeal will take place, and therefore  $D(1) = g_s - (\beta_a + \beta_c)$ . Given the assumptions,  $D(q)$  must be continuous in  $q$  on  $[0, 1]$ .<sup>61</sup> Also,  $D(q)$  is lowest at  $q = 0$ , is positive for  $q > 0$ , and reaches its maximum at

59. The conclusions for the case in which appeal will not be made even when it is certain to succeed will be obvious.

60. When equation (A3) 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.

61. It is obvious that  $D(q)$  is continuous for  $q$  in  $(0, 1)$ . That  $D(q)$  is continuous at zero and one follows from the Helly-Bray theorem; see, for example, Rao (1965, p. 97).

$q = 1$ . The assumption of first-order stochastic dominance implies that  $D(q)$  is monotonically increasing in  $q$ .<sup>62</sup>

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

$$qg_s \geq \beta_a + \beta_c \quad \text{or when} \quad q \geq t^*. \quad (\text{A5})$$

Now if  $q < t^*$ , then by equation (A5) 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  $D(q) > \alpha_a + \alpha_c$ .

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

$$\begin{aligned} D(q) - [qg_s - (\beta_a + \beta_c)] &= \int_{t^*}^1 [pg_s - (\beta_a + \beta_c)]b(p|q)dp \\ &\quad - \int_{t^*}^0 [pg_s - (\beta_a + \beta_c)]b(p|q)dp \\ &= \int_0^1 [(\beta_a + \beta_c) - pg_s]b(p|q)dp, \end{aligned} \quad (\text{A6})$$

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 equation (A6) exceeds  $\alpha_a + \alpha_c$ . The assumption of stochastic dominance implies that equation (A6) is monotonically decreasing in  $q$ .<sup>63</sup> Note that at  $q = 1$ , equation (A6) reduces to

$$D(1) - [g_s - (\beta_a + \beta_c)] = 0, \quad (\text{A7})$$

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

Hence, the value of discretionary review relative to the best alternative is monotonically increasing for  $q$  below  $t^*$  and monotonically decreasing for  $q$  at least  $t^*$ .

62. Consider  $q_2 > q_1$ . I 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  $\int_{t^*}^1 [pg_s - (\beta_a + \beta_c)]dG(p)dp = \{[pg_s - (\beta_a + \beta_c)]G(p)\}_{t^*}^1 - \int_{t^*}^1 g_s G(p)dp$ . The first term on the right equals  $-[t^*g_s - (\beta_a + \beta_c)]G(t^*)$  since  $G(1) = 0$ , and  $[t^*g_s - (\beta_a + \beta_c)] = 0$  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  $D(q_2) > D(q_1)$ .

63. The proof is essentially the same as that in note 62.

That is, if and only if

$$D(t^*) = \int_{t^*}^1 [pg_s - (\beta_a + \beta_c)]b(p|t^*)dp > \alpha_a + \alpha_c, \quad (\text{A8})$$

are there  $q$  for which discretionary review is desirable. Furthermore, when equation (A8) holds, there is a positive interval  $(a, b)$ , in which discretionary review is desirable, where  $a < t^* < b$ , and outside of which it is undesirable. Since  $D(0) = 0$  and  $D(q)$  is continuous in  $q$ , we also know that discretionary review must be undesirable in a neighborhood of zero. This implies that  $a > 0$ , where  $a$  is defined by

$$D(a) = \alpha_a + \alpha_c. \quad (\text{A9})$$

Likewise, since equation (A7) holds and equation (A6) is continuous in  $q$ , discretionary review must be undesirable in a neighborhood of one. This implies that  $b < 1$ , where  $b$  is defined by

$$D(b) - [bg_s - (\beta_a + \beta_c)] = \alpha_a + \alpha_c. \quad (\text{A10})$$

The following statement describes the conclusions that I have reached.

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

- a)* Suppose that the costs of discretionary review are below  $D(t^*)$ . Then
- i) if the appellant's prior probability  $q$  of reversal is in  $[0, a]$ , where  $0 < a < t^*$  and  $a$  is defined by equation (A9), there should be no appeal and no discretionary review;
  - ii) if  $q$  is in  $(a, b)$ , where  $t^* < b < 1$  and  $b$  is defined by equation (A10), there should be discretionary review; after discretionary review, there should be appeal if and only if the appeals court's probability  $p$  exceeds  $t^*$ ; and
  - iii) if  $q$  is in  $[b, 1]$ , then there should be no discretionary review, but there should be appeal.
- b)* Suppose that the costs of discretionary review equal or exceed  $D(t^*)$ . Then
- i) if  $q$  is less than  $t^*$ , there should be no appeal and no discretionary review; and
  - ii) if  $q$  exceeds  $t^*$ , there should be no discretionary review, but there should be appeal.

Had I not made the assumption of stochastic dominance, the region over which discretionary review is desirable might not have been an interval, but there would still be a neighborhood of zero in which neither discretionary review nor appeal is desirable and a neighborhood of one in which discretionary review is not desirable but appeal is desirable.

## A2. Actual Behavior and Optimal Policy

Let the gain to an appellant from reversal be

$g_a$  = expected gain to an appellant due to a reversal;  $g_a > 0$ ;<sup>64</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). In addition, let

$g_c$  = expected gain to the appeals court due to a reversal;  $g_c > 0$ ;<sup>65</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

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

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

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

$$pg_c \geq (k_a\beta_a + k_c\beta_c) \quad \text{or when} \quad p \geq (k_a\beta_a + k_c\beta_c)/g_c = t_c^*. \quad (\text{A11})$$

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

$$D_a(0) = 0;$$

$$D_a(q) = \int_{t_c^*}^1 [pg_a - \beta_a]b(p|q)dp \quad \text{for } q \text{ in } (0, 1); \quad (\text{A12})$$

$$D_a(1) = g_a - \beta_a,$$

where (reasoning as with regard to  $D[q]$ ), we know that  $D_a(q)$  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

$$qg_a \geq \beta_a \quad \text{or when} \quad q \geq \beta_a/g_a = t_a^*. \quad (\text{A13})$$

Hence, if  $q < t_a^*$ , since he would not undertake an appeal, he will choose discretionary review if and only if  $D_a(q) > \alpha_a$ . If  $q \geq t_a^*$ , since he would undertake

64. It is plausible that  $g_a$  differs from  $g_c$ . For example,  $g_a$  could exceed  $g_c$  if reversal would yield a plaintiff victory and significant damages but result in little deterrence, and  $g_a$  could be less than  $g_c$  if reversal would yield a plaintiff only modest damages but create substantial deterrence or a significant change in precedent.

65. It is possible that  $g_c$  differs from  $g_a$  because an appeals court judge might have views that depart from society's.

an appeal if he did not choose discretionary review, the value of discretionary review over appeal is

$$D_a(q) - [qg_a - \beta_a] = \int_0^{t_a^*} [\beta_a - pg_a]b(p|q)dp, \quad (A14)$$

which is monotonically decreasing in  $q$  and which is zero at  $q = 1$ . For such  $q$ , the appellant will undertake discretionary review if and only if  $D_a(q) - [qg_a - \beta_a] > \alpha_a$ .

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

$$D_a(t_a^*) = \int_{t_a^*}^1 [pg_a - \beta_a]b(p|t_a^*)dp > \alpha_a \quad (A15)$$

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

$$D_a(a_a) = \alpha_a \quad (A16)$$

and

$$D_a(b_a) - [b_ag_a - \beta_a] = \alpha_a. \quad (A17)$$

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,  $\alpha_a$ , are below a threshold,  $D_a(t_a^*)$ .

- a) Suppose that the appellant's costs of discretionary review are below  $D_a(t_a^*)$ . Then
- i) if the appellant's prior probability  $q$  of reversal is in  $[0, a_a]$ , where  $a_a$  is positive, less than  $t_a^*$ , and defined by equation (A16), he will not make an appeal and will not request discretionary review;
  - ii) if  $q$  is in  $(a_a, b_a)$ , where  $b_a$  exceeds  $t_a^*$ , is defined by equation (A17), and is less than one, 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  $t_a^*$ ; and
  - iii) if  $q$  is in  $[b_a, 1]$ , there will be no discretionary review, but there will be appeal.
- b) Suppose that the appellant's costs of discretionary review,  $\alpha_a$ , are at least  $D_a(t_a^*)$ . Then
- i) if  $q$  is less than  $t_a^*$ , he will not make an appeal and will not obtain discretionary review; and
  - ii) if  $q$  exceeds  $t_a^*$ , he will make an appeal.



The behavior of appellants and appeals courts will not generally be socially optimal because of a number of factors: the appellant bears only his own costs of appeal or of discretionary appeal, not those of the court (or of his adversary); the appellant's gains from appeal may be less than or greater than society's; and the appeals court also may weigh costs and benefits differently from society.

One category of social policy that might be employed to improve social welfare is to limit the choices of appellants. Consider the following regimes: (1) either type of appeal—discretionary review or appeal, (2) appeal only, (3) discretionary review only. Any of these three regimes could be superior to the other two. Regime 1 would clearly be best if, for example, the distortions due to the factors mentioned above were small.<sup>66</sup> Regime 2 could be desirable if appellants would often want to choose discretionary review but this were socially undesirable because, say, the appellants do not bear the social cost of discretionary review.<sup>67</sup> Regime 3 could be desirable if, for example, the social costs of appeal are relatively high, making the overuse of appeals significant.<sup>68</sup>

A different social policy involves corrective fees for appeals and discretionary review as well as incentives based on the occurrence of reversals. Suppose that appellants must pay a fee equal to judicial costs  $\beta_c$  for an appeal and a fee of  $\alpha_c$  for discretionary review and that appellants receive a payment of  $g_s - g_a$  for a reversal. Suppose that the court must pay a fee of  $(\beta_a + \beta_c) - (k_a\beta_a + k_c\beta_c)$  for an appeal and that the court receives  $g_s - g_c$  if there is a reversal. Then if there is discretionary review, the appeals court will hold an appeal if and only if

66. Suppose that  $g_c = g_s$  and that  $k_a = k_s = 1$ , so that the appeals court's objective is the same as society's. Suppose also that  $g_a = g_s$  and that  $\beta_c = r\beta_a$  and  $\alpha_c = r\alpha_a$ , where  $r$  is positive. As  $r$  tends to zero, 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 choose only 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 choose only appeal (for then when  $a \leq q \leq b$ , discretionary review cannot be chosen, even though it is socially desirable).

67. Suppose as in note 67 that  $g_c = g_s$  and that  $k_a = k_s = 1$ , so that the appeals court's objective is the same as society's. Suppose also that  $g_a = g_s$ , that  $\alpha_a = 0$ , and that  $\alpha_c$  is sufficiently high that equation (A8) is not satisfied, which means that discretionary review is never socially desirable. Appellants, however, would always choose discretionary review over appeal because  $\alpha_a = 0$ . Hence, social welfare will be higher if appeal only is available to appellants.

68. Suppose again that  $g_c = g_s$  and that  $k_a = k_s = 1$ , so that the appeals court's objective is the same as society's. Suppose also that  $g_a = g_s$ , that  $\beta_a = 0$ , that  $\alpha_a > 0$ , and that  $\alpha_a + \alpha_c$  satisfies equation (A8) 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.

$$p[g_c + (g_s - g_a)] \geq (k_a\beta_a + k_c\beta_c) - [(\beta_a + \beta_c) - (k_a\beta_a + k_c\beta_c)] \quad (\text{A18})$$

or when  $pg_s \geq \beta_a + \beta_c$ ,

which is equation (A3). 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  $D_a(q)$  equals its social value  $D(q)$ : if  $q = 0$ ,  $D_a(q)$  is clearly zero; if  $q$  is in  $(0, 1)$ , the integrand in equation (A12) becomes  $p[g_a + (g_s - g_a)] - (\beta_a + \beta_c) = pg_s - (\beta_a + \beta_c)$ , which is the integrand in equation (A4), and  $t_c^* = t^*$  because of equation (A18), so that  $D_a(q) = D(q)$ ; and if  $q = 1$ , the appellant's position is  $[g_a + (g_s - g_a)] - (\beta_a + \beta_c) = g_s - (\beta_a + \beta_c)$ , 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  $q[g_a + (g_s - g_a)] - (\beta_a + \beta_c) = qg_s - (\beta_a + \beta_c)$ . It follows from these observations that the appellant will behave socially optimally. Hence, we have the following proposition.

**Proposition 3.**

- a) Consider 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  $g_s - g_a$  for a reversal, and suppose that the appeals court pays a fee equal to  $(\beta_a + \beta_c) - (k_a\beta_a + k_c\beta_c)$  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 choose only discretionary review or only appeal.

In Shavell (2009) I considered two extensions to the model. One reflects the possibility that discretionary review lowers the cost of appeal, namely, that a fraction  $\lambda$  of expenditures on discretionary review offsets the cost of future appeal, so if there is discretionary review, the cost of an appeal falls to  $(\beta_a + \beta_c) - \lambda(\alpha_a + \alpha_c)$ . The other extension allows appellants to have private information that would not be learned by the appeals court during discretionary review but would be learned in an appeals proceeding.

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