Delaware Bankruptcy: Failure in the Ascendancy

Lynn M. LoPucki† & Joseph W. Doherty††

In a gracious review of Lynn M. LoPucki’s recently published book, Courting Failure: How Competition for Big Cases Is Corrupting the Bankruptcy Courts, Professors Kenneth Ayotte and David A. Skeel, Jr. make a spirited defense of the Delaware bankruptcy court’s indefensible rise to national dominance. That rise occurred from 1990 through 1996, on the basis of a disastrous performance in large public company reorganization.

What is at stake here is much more than Delaware’s new billion-dollar-a-year big case bankruptcy business. The Delaware bankruptcy court’s competitive success, based on failed reorganizations, is a smoking gun in the case against regulatory competition. If Delaware has achieved spectacular success in attracting big reorganization cases despite spectacular failure reorganizing the attracted companies, it is also plausible that Delaware could have attracted the incorporation industry a hundred years ago and retained it since while providing an inferior corporate governance regime.

Prior to 1990, the United States Bankruptcy Court for the District of Delaware was a one-judge backwater. In the 1980s—the first decade in which significant numbers of large public companies filed for bankruptcy reorganization—that court presided over only a single one of them. In 1990, the Delaware court attracted two large public companies from outside the state. In 1991 it attracted four, and in 1992, six. By 1996, the Delaware bankruptcy court had a near monopoly on large public company bankruptcies. That year, thirteen of the fifteen

† Security Pacific Bank Professor of Law at the UCLA School of Law (lopucki@law.ucla.edu); Bruce W. Nichols Visiting Professor of Law at the Harvard Law School (llopucki@law.harvard.edu). We thank Frances Foster for comments.
†† Director of the Empirical Research Group, UCLA School of Law (doherty@law.ucla.edu).
1 Lynn M. LoPucki, Courting Failure: How Competition for Big Cases Is Corrupting the Bankruptcy Courts (Michigan 2005).
3 See LoPucki, Courting Failure at 49.
4 That reorganization was of Phoenix Steel, a Delaware company that filed for bankruptcy in 1983. Id.
5 Id.
6 Id at 50.
large public companies that filed for bankruptcy anywhere in the United States did so in Delaware.  

Many scholars, practitioners, and judges were appalled at the idea of courts competing for their caseloads. In 1997 the National Bankruptcy Review Commission recommended that Congress put a stop to it by requiring that the companies file in their local bankruptcy courts. A few, however, hailed Delaware’s “success” in large public company bankruptcy as a “race to the top,” often analogizing it to Delaware’s success in large public company incorporation.  

In June 2000, Lynn M. LoPucki and Sarah D. Kalin released a study showing that companies emerging from Delaware reorganization from 1991 through 1996 were three to seven times more likely to have filed a second bankruptcy. In a later study of reorganization during that period, we found that 42 percent of Delaware-reorganized companies that emerged from bankruptcy as public companies were back in bankruptcy within five years, as compared with only 4 percent of companies reorganized in courts other than Delaware and New York (hereafter referred to as “Other Courts”). These dramatic findings of Delaware failure were robust across several measures:

---

7 Id.
8 For example, in a survey by the Federal Judicial Center, 22 percent of bankruptcy judges said that they were aware of one or more Chapter 11 cases filed in another district that should have been transferred to their district but were not. Federal Judicial Center, Chapter 11 Venue Choice by Large Public Companies 19 (1997). A large majority of the cases they identified were filed in the District of Delaware or the Southern District of New York. Id at 20. Chicago bankruptcy lawyer Gerald Munitz told the National Bankruptcy Review Commission that forum shopping “demeaned the entire system by suggesting that the bankruptcy courts were for sale.” LoPucki, Courting Failure at 78 (cited in note 1).
9 See National Bankruptcy Review Commission, Bankruptcy: The Next Twenty Years 35 (GPO 1997) (Recommendation 3.1.5).
10 See, for example, David A. Skeel, Jr., Bankruptcy Judges and Bankruptcy Venue: Some Thoughts on Delaware, 1 Del L Rev 1, 33 (1998) (“[T]he Delaware bar will play an important role [in the selection of bankruptcy judges] and will select for many of the same qualities we see in Delaware’s regulation of corporate law.”).
TABLE 1: REORGANIZATION FAILURES BY COURT, PUBLIC COMPANIES EMERGING 1991–1996

<table>
<thead>
<tr>
<th></th>
<th>Delaware</th>
<th>New York</th>
<th>Other Courts</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refiling</td>
<td>42%</td>
<td>19%</td>
<td>4%</td>
<td>p &lt; .001</td>
</tr>
<tr>
<td>Business Failure</td>
<td>24%</td>
<td>25%</td>
<td>13%</td>
<td>p &lt; .10</td>
</tr>
<tr>
<td>Plan Failure</td>
<td>54%</td>
<td>31%</td>
<td>14%</td>
<td>p = .001</td>
</tr>
<tr>
<td>Profit</td>
<td>-9%</td>
<td>-3%</td>
<td>1%</td>
<td>p = .002</td>
</tr>
<tr>
<td>Operating Profit</td>
<td>1%</td>
<td>4%</td>
<td>7%</td>
<td>p = .006</td>
</tr>
</tbody>
</table>

Ayotte and Skeel do not challenge the accuracy of these measurements. They would exonerate the Delaware bankruptcy court nevertheless by attributing Delaware’s high failure rates to two effects for which the court would not be responsible. The story they tell begins with a selection effect in which the weakest companies chose Delaware reorganization because Delaware reorganization was less expensive. Then, knowing the companies were weak, the parties to the reorganizations “keep the companies and their managers on a short leash” by loading them down with debt that would assure their quick return to bankruptcy if they performed poorly. The effect was to magnify the weakness that resulted from the selection effect. The resulting high reorganization rates in Delaware were nevertheless efficient, they claim, because (1) reorganization failure is not costly, and (2) the firms voluntarily chose the Delaware regime, thus proving it to be efficient. To put it another way, the parties to Delaware reorganizations were doing the best that could be done with bad material and lost little money along the way. The Delaware court bears no responsibility; it merely provided a relatively cheap, relatively ineffective type of proceeding that better suited the needs of weaker firms.

Part I describes the economic model that generates Ayotte and Skeel’s selection effect, notes the lack of any evidence for the effect’s actual existence, and shows that the model—though internally consistent—rests on empirically doubtful assumptions and generates empirically doubtful predictions. Part II considers the empirical data that Ayotte and Skeel provide for the proposition that reorganization failure is not costly: the firm’s operating profits measured as earnings before interest, taxes, depreciation, and amortization (EBITDA). We respond that EBITDA is an extreme overstatement of a newly-

13 Ayotte and Skeel, 73 U Chi L Rev at 464 (cited in note 2).
14 As Ayotte and Skeel put it, each firm was opting for “distress resolution procedures that are best tailored to [its] circumstances.” Id at 437.
reorganized business’s earnings and that earnings are only one of several components of reorganization failure cost. We present new empirical evidence that Delaware refilers rarely recovered from their refilings. Part III considers Ayotte and Skeel’s argument that high leverage rather than low earnings drove Delaware’s high refailure rates. We confirm Ayotte and Skeel’s empirical finding that the EBITDA of Delaware-reorganized firms are not significantly lower than the EBITDA of firms reorganized in Other Courts, and we agree that leverage probably played a greater role than previously reported in Delaware’s reorganization failures. We explain, however, that even if Ayotte and Skeel are correct with respect to these issues, the reorganization failures are no less real and the Delaware bankruptcy court no less responsible. Part IV considers and rejects Ayotte and Skeel’s argument that the bankruptcy courts can protect reorganizing companies against the loan-and-control strategies of modern debtor-in-possession (DIP) lenders. DIP lenders would simply avoid courts that sought to control them. Part V concludes that the evidence to date suggests that Delaware’s high reorganization failure rates are exactly what they appear to be: proof of the catastrophic failure of Delaware’s reorganization methods.

I. THE AYO'TTE-SKEEL MODEL

Ayotte and Skeel present an economic model of the choice between two kinds of bankruptcy reorganization: an inexpensive, relatively ineffective “workout” that “does little to affect [the firm’s] operations” and an expensive, relatively effective “restructuring” that “improve[s] its operations.” The model is not per se a model of the choice between Delaware and other court reorganization, but Ayotte and Skeel encourage us to think of it that way:

The difference between the less costly but less thorough “workout” option and the more costly but more thorough “restructuring” option can be thought of in two ways that are relevant to the current debate. The workout can be thought of as a prepackaged Chapter 11, while the restructuring can be thought of as a “full-blown” Chapter 11. To interpret the model differently, within the category of “full-blown” Chapter 11 cases, a Delaware reorganization (which is faster and thus less costly) is likely to resemble

---

15 Id at 439.
16 Id at 438.
the workout option, while cases in other courts resemble the re-
structuring option.\(^\text{17}\)

Thus, in the analogy, it is Delaware that offers the inexpensive, rela-
tively ineffective workouts. For the weakest, most difficult to reorgan-
ize companies, Ayotte and Skeel argue, the lack of effectiveness of
Delaware workouts is more than offset by the cost savings.

In the model's first period, distressed companies choose between
the two types of reorganizations. Three possible results follow in the
second period: (1) the company's financial problems are resolved for
the better and the firm continues, (2) the company's financial prob-
lems are resolved for the worse and the company is liquidated, or (3)
the company needs a restructuring.\(^\text{18}\)

In this model, Ayotte and Skeel note, relatively weak companies
are more likely to choose workouts than restructurings in the first pe-
riod. That self-selection occurs because the weak companies are less
certain they will be around in the second period when those who
skimped in the first period might have to pay the high cost of a re-
structuring. In other words, the weaker companies choose the less-
effective workout because the total cost of the workout plus the later
restructuring if needed is, on average, lower than the total cost of an
immediate restructuring. Stronger companies choose the more-effective
restructuring, because they are more certain they will survive and thus
have to pay the high cost of a restructuring in the second period if
they did not pay it in the first. The result is a selection effect that takes
the weakest companies into workouts—and by analogy into Dela-
ware—in the first period.

The model is internally consistent. Begin from Ayotte and Skeel's
assumptions and you will reach their conclusions. The assumptions do
not flatly contradict any empirical finding, and the model's story
passes the straight-face test.\(^\text{19}\) The model's existence reminds us that
the failure of reorganized companies does not necessarily equate to
the failure of the process that reorganized them. The portrayal of
Delaware reorganization as cheap and relatively ineffective is cer-
tainly a step down from the accolades bestowed on the Delaware
court before its high refailure rates came to light. But considering the
magnitude of those rates, Delaware's supporters should rejoice that an
exculpatory story can be told at all.

\(^{17}\) Id at 439 (citations omitted).
\(^{18}\) Id at 439–40.
\(^{19}\) See \textit{In re Delbridge}, 61 BR 484, 486 n 1 (Bankr ED Mich 1986) ("An argument passes
the straight-face test if it is one which a competent and ethical lawyer can make while maintain-
ing a straight face.").
The Ayotte-Skeel model is unpersuasive for two reasons. First, no empirical support exists for either of the two key assumptions that drive the model. Second, the model generates predictions that conflict with the empirical evidence.

A. Unsupported Assumptions

The fulcrum of the Ayotte-Skeel model is a selection effect that pushes the weakest companies into the Delaware bankruptcy court. The imposition of higher debt on Delaware-reorganizing companies in the second stage of the model—which also contributes to refailure—is warranted only because the model generated that selection effect at the first stage.

If a selection effect large enough to generate Delaware's high refailure rates exists in the real world, one would expect the difference between the two sets of companies to be apparent. But after comparing the firms filing in Delaware with the firms filing in Other Courts on several measures of the firms' financial distress prior to bankruptcy, on the firms' size, on the complexity of the firms' financial structures, and on the firms' industries, we found no significant differences that could account for Delaware's higher failure rates. After seeing Ayotte and Skeel's review touting EBITDA as the best measure of firm performance, we also compared the prefiling EBITDA of the Delaware and Other Court groups. Again, we found no statistically significant difference. With regard to each of these characteristics, the firms choosing Delaware appear no weaker or more difficult to reorganize than the firms choosing Other Courts. Ayotte and Skeel present no evidence to the contrary and suggest no additional characteristics for testing. Referring to our tests they reply:

Although such simple observable measures might identify an obvious selection effect, the failure to find obvious observable differences driving both the filing decision and refailure does not rule out the presence of selection. In most empirical studies of this kind, researchers recognize the possibility of unobservable differences and use econometric techniques (such as instrumental variables) to eliminate them. In our own research, we have found such an approach to be difficult, in part due to the small sample size and the lack of plausible instruments. Given the in-

---

20 Addressing the difference in failure rates between Delaware and Other Courts, Ayotte and Skeel argue that "all of the patterns we see in the data could have resulted from a pure selection effect." Ayotte and Skeel, 73 U Chi L Rev at 437 (cited in note 2).
22 The data are posted at http://www.law.ucla.edu/erg/ (visited Oct 17, 2006).
herent difficulty involved, we believe it is sensible to acknowledge the possibility that unobservable selection could be driving the results, especially because we have identified a plausible explanation for it in our theoretical model, and anecdotal evidence from practitioners indicates that the “tougher” cases often go to Delaware to take advantage of the expertise of its judges.23

Unobservable selection effects could be driving the results. At present, however, there is not a shred of evidence that they are.24 The characteristic of firms choosing Delaware that makes them weaker and more difficult to reorganize is merely a hypothetical one. If there was a selection effect among these ninety-eight cases, it had to have operated through deliberate choices made by the case-placeors. We do not see how those case-placeors could sort on the basis of a characteristic without identifying the characteristic. Yet in the six years of controversy since the first study showing Delaware’s elevated failure rates, no one has come forward with a plausible, still untested characteristic.

Ayotte and Skeel refer to “anecdotal evidence from practitioners” attesting that Delaware got the “tougher” cases, but they do not present that evidence. We suspect it is only the self-serving statements made by lawyers after Delaware’s failure came to light and Delaware’s supporters began looking for excuses. To the extent we have heard these statements, the characteristics the lawyers identify as driving the selection are the very ones we have already shown could not have. Finally, Ayotte and Skeel’s assertion here that the tougher cases go to Delaware to take advantage of the “expertise of its judges” seems in conflict with their oft-repeated assertion that the judges have no role in generating Delaware’s outcomes.25

The assumption that drives the selection effect—that the cost of a Delaware bankruptcy is lower than the cost of an Other Court bankruptcy—is similarly lacking in support. In an earlier study, we found that Delaware’s speed did not make the direct cost of a Delaware bankruptcy (measured by court-awarded professional fees and expenses) lower than the direct cost of an Other Court bankruptcy for

23 Ayotte and Skeel, 73 U Chi L Rev at 449 n 54 (cited in note 2).
24 We posted the data from our study at http://www.law.ucla.edu/docs/lopucki-doherty-delaware.zip in 2002 and it has been downloaded more than one hundred times. Given the level of interest in our findings, we think it unlikely that anyone will at this late date come up with a variable or technique that will demonstrate a selection effect in these cases.
25 Ayotte and Skeel, 73 U Chi L Rev at 468 n 54 (cited in note 2). See also id at 448 (“Attributing any postbankruptcy underperformance to causality by some feature of the Delaware bankruptcy process is even more speculative.”), 453 (“[C]autious should be exercised in attributing causality of outcomes to bankruptcy courts rather than to the conditions of the companies that choose them.”).
an identical company.\textsuperscript{36} Ayotte and Skeel accept that finding for purposes of argument,\textsuperscript{27} and rely instead on an assumed difference in indirect costs.\textsuperscript{28} They do not explain why they believe the indirect costs of bankruptcy would be lower in Delaware. The only reason we can think of for making such an assumption is that Delaware bankruptcies are of shorter duration than bankruptcies in Other Courts.

First, as the data in Table 2 show, the difference in speed between Delaware and Other Court duration was not substantial. (Nor is it statistically significant.)\textsuperscript{29} For a given type of case, the time savings and hence the indirect cost savings would have been small.\textsuperscript{30}

<table>
<thead>
<tr>
<th></th>
<th>Delaware</th>
<th>Other Courts</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean days in reorganization</td>
<td>Mean days in reorganization</td>
<td>Percent shorter in Delaware</td>
</tr>
<tr>
<td>Nonprepackaged, nonprenegotiated</td>
<td>619</td>
<td>7</td>
<td>714</td>
</tr>
<tr>
<td>Prenegotiated</td>
<td>160</td>
<td>5</td>
<td>206</td>
</tr>
<tr>
<td>Prepackaged</td>
<td>42</td>
<td>14</td>
<td>49</td>
</tr>
<tr>
<td>Total n</td>
<td>26</td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

Weighing these percentage savings by the number of each type of Delaware case involved, the average savings per case is a little over 15 percent. To see why a 15 percent savings in the indirect costs of bankruptcy cannot justify a 36 percent increase in the bankruptcy refiling rate, consider a model in which:

\textsuperscript{26} See Lynn M. LoPucki and Joseph W. Doherty, The Determinants of Professional Fees in Large Bankruptcy Reorganization Cases, 1 J Empirical Leg Stud 111, 131 (2004) ("Controlling for firm size, length of the proceedings, and number of professional firms in the case, we found that Delaware awarded fees that were significantly higher — 32% higher — than those awarded in other courts."). Controlling only for firm size, we found that "Delaware fees were very slightly higher than fees in other courts, but the difference was not statistically significant." Id.

\textsuperscript{27} See Ayotte and Skeel, 73 U Chi L Rev at 437 n 30 (cited in note 2) ("[E]ven if [LoPucki's finding about direct costs] is correct, it is widely agreed . . . that direct costs are only a small portion of the costs of bankruptcy.").

\textsuperscript{28} Id ("Indirect costs loom much larger.").

\textsuperscript{29} Nonprepack/Nonprenegotiated (F = 0.293, df =1, p = 0.590); Prenegotiated (F = 1.213, df = 1, p = 0.307); Prepackaged (F = 0.853, df = 1, p = 0.365). The significance levels are similar (for example, p > 0.25) when the days in reorganization are transformed into natural logs.

\textsuperscript{30} When comparing the length of reorganization cases it is appropriate to control for case type because case type is independent of the court in which the case is filed. In reality, as in Ayotte and Skeel's model, cases are prepackaged or not for reasons having nothing to do with the court in which the cases are filed.
\( I_o \) = the indirect cost of a bankruptcy case in an Other Court

\( D_o \) = the direct cost of a bankruptcy case in an Other Court

If the indirect cost of a bankruptcy case in the Delaware bankruptcy court \((I_d)\) is 15 percent lower than the indirect cost of a bankruptcy case in an Other Court and the direct cost of such cases are equal, then the total cost of filing the initial case in Delaware is, on average, the cost of the initial case plus 42 percent of the cost of a second case:

\[
(D_o + .85I_o) + .42(D_o + .85I_o)
\]

which reduces to

\[1.42D_o + 1.207I_o\]

The cost of filing the initial case in an Other Court with a 6 percent chance of refiling is, on average, the cost of the initial case plus 6 percent of the cost of a second case:

\[
(D_o + I_o) + .06(D_o + I_o)
\]

which reduces to

\[1.06D_o + 1.06I_o\]

Thus, when Delaware has a 42 percent refiling rate and Other Courts have a 6 percent refiling rate, the indirect cost savings from filing the initial case in Delaware are outweighed by the costs of the additional refilings alone.

\[1.42D_o + 1.207I_o > 1.06D_o + 1.06I_o\]

Thus it is mathematically impossible for the savings from a 15 percent reduction in the indirect costs of bankruptcy to outweigh the added costs from an increase in the refiling rate from 6 percent to 42 percent. The result would remain the same even if Delaware cases were 25 percent, rather than 15 percent, shorter than Other Court cases.\(^{31}\)

B. Predictions That Contradict the Empirical Findings

As Milton Friedman pointed out in his famous essay on the topic, the acid test of a theory is whether it predicts empirical reality.\(^ {32}\) Ayotte and Skeel’s model fails this test by generating five erroneous predictions:

\(^{31}\) At a 25 percent savings in indirect costs, the anticipated indirect costs of the initial filing would be 0.75 and the anticipated indirect costs of the second filing would be \(0.42 \times 0.75 = 0.315\). Total indirect costs would be \(0.75 + 0.315 = 1.065\) compared with Other Courts’ 1.06.

1. Speed, not court, causes reorganization failure.

In Ayotte and Skeel's model, workouts, prepackaged reorganizations, and Delaware cases fail more often only because they are shorter and "less thorough." Based on such a model, one would expect that in cases where Other Courts proceeded with the same haste, their reorganizations would fail at the same high rates. In fact, they do not.

There are at least two ways to see that Ayotte and Skeel's attribution of high failure rates solely to the speed of the proceeding is in conflict with the data. In the relevant period, Delaware's 26 cases averaged only 220 days in bankruptcy. The 26 fastest cases in Other Courts, however, were even faster than Delaware's 26 cases, averaging only 176 days in bankruptcy. Yet the 26 fastest Other Court cases produced only 1 refiling (4 percent), as compared with 11 refilings among Delaware's 26 cases (42 percent).

Another way to see the same point is through regression analysis. We conducted such an analysis and published it as part of our earlier study. In predicting refiling, that analysis shows that after controlling for leverage, firm shrinkage, days in bankruptcy, numbers of plan classes, and whether the bankruptcy was prepackaged, the location of the case in Delaware remains statistically significant at the .01 level. The regression model that includes place of filing explains more than twice as much of the failure as does one that includes only the other four variables—one of which was the length of the case.

2. Prepacks are more likely to fail.

The Ayotte-Skeel model posits that "workouts"—prepackaged cases—are inherently more likely to fail, regardless of the court in which they were filed. Consistent with that postulate, seven of Dela-
ware's fourteen prepacks (50 percent) led to refiling. But of the fifteen prepacks filed in New York or Other Courts, not a single one led to refiling. The evidence that prepacks are more likely to fail comes solely from Delaware and hence can provide no defense of Delaware.

| TABLE 3: NEW YORK AND OTHER COURT REFILING RATES, BY PREPACKAGED STATUS |
|---------------------------------|-----------------|-----------------|
| Cases                          | Refilings       | Percent Refiling |
| Prepackaged                    | 15              | 0%              |
| Prenegotiated                  | 4               | 0%              |
| Nonprepackaged, nonprenegotiated| 57              | 6               | 11%            |
| Totals                         | 76              | 6               | 8%             |

3. Delaware companies reduced costs by failing without restructuring.

In Skeel and Ayotte's model, the weaker companies efficiently choose a less effective Delaware reorganization because they are less likely to remain in business long enough to have to refile and incur the greater expense of a restructuring:

If the firm's future prospects are poor ($p_b$ is high), then a cheaper workout alternative is likely to be preferred, since part of the benefits of a full restructuring ($d$) accrue only when the firm survives. The more likely the firm is to fail, the greater are the gains to waiting before attempting a full restructuring of operations. ①

If this is what drives the model, then we should expect substantially fewer Delaware-reorganized than Other Court-reorganized firms to survive long enough to need refilings. In fact, forty-four of sixty Other Court-reorganized companies (73 percent) remained in business until refiling or for five years after confirmation. The corresponding ratio for Delaware-reorganized companies was seventeen of twenty-six (65 percent). The difference is neither statistically significant nor sufficiently substantial to support the model. Had even two more Delaware firms survived, Delaware's ratio would have been the same as the Other Courts ratio. Two data points are not enough. ④

Ayotte and Skeel, 73 U Chi L Rev at 440 (cited in note 2). Recall that Ayotte and Skeel tell us that "[t]he workout can be thought of as a prepackaged Chapter 11, while the restructuring can be thought of as a 'full-blown' Chapter 11." Id at 439.

① Ayotte and Skeel, 73 U Chi L Rev at 441 (cited in note 2).

④ With apologies to Baird and Rasmussen. See Douglas G. Baird and Robert K. Rasmussen, Beyond Recidivism, 53 Buff L Rev (forthcoming 2006) (criticizing one of our findings on the ground that "[t]hree data points are not enough").
4. Failed Delaware workouts would lead to restructuring in Other Courts.

In the Ayotte-Skeel model, the purpose of a Delaware filing (a workout) is to delay incurring the costs of restructuring because those costs might not have to be incurred at all.41 Thus, we should expect a pattern in which companies file their first case as a prepack and their refiling as nonprepack. In fact the first cases filed by nine of the seventeen refilers (53 percent) were neither prepackaged nor renegotiated. Also, we should expect a pattern in which companies file their first case in Delaware and their refiling in Other Courts. In fact, only five of the eleven Delaware refilers (45 percent) chose a court other than Delaware for their second cases.42 Six returned to the Delaware court.43 Thus, in both these respects, more companies acted contrary to Ayotte and Skeel’s model than acted consistent with it.

5. Stronger firms will take longer to restructure.

The Ayotte-Skeel model operates on a selection effect in which stronger firms file in Other Courts and take longer to reorganize. In support of the model, Ayotte and Skeel present an empirical finding from their 2004 study.44 "[F]irms with higher prebankruptcy EBITDA to Assets ratios take significantly longer to reorganize."45 Ayotte and Skeel argue that this finding is “consistent with the logic in [their] model: the firms with better postbankruptcy prospects should ration-

---

41 Ayotte and Skeel, 73 U Chi L Rev at 441 (cited in note 2) (“The underlying intuition is that restructuring should be undertaken now if it is likely to be required later in any case. When p, is low . . . the ‘option value’ of waiting to restructure is higher, since the likelihood of saving on restructuring costs . . . is higher.”).
43 See Notice of Bankruptcy Case Filing, In re Spectravision, Inc, Case No 95-00659 (Bankr D Del filed June 8, 1995); Notice of Bankruptcy Case Filing, In re Memorex Telex Corp, Case No 94-00109 (Bankr D Del filed Feb 11, 1994); Notice of Bankruptcy Case Filing, In re Memorex Telex Corp, Case No 95-01615 (Bankr D Del filed Oct 15, 1996); Notice of Bankruptcy Case Filing, In re Cherokee, Inc, Case No 94-01061 (Bankr D Del filed Nov 7, 1994); Notice of Bankruptcy Case Filing, In re Harvard Industries Inc, Case No 97-00954 (Bankr D Del filed May 8, 1997); Notice of Bankruptcy Case Filing, In re Ithaca Industries, Inc, Case No 00-01914 (Bankr D Del filed May 9, 2000).
44 Ayotte and Skeel, 73 U Chi L Rev at 461 (cited in note 2).
ally choose a longer, and hence more thorough, restructuring." We have no quarrel with their logic. But Ayotte and Skeel made their finding in a data set that contained smaller cases from a later period. Their finding was only weakly significant. In our own study of the set of companies that are the subject of this dispute, we confirm the null hypothesis: firms with higher prebankruptcy EBITDA/Assets—using EBITDA for the year before filing or the average EBITDA for the five years before filing—do not take significantly longer to reorganize.

Together these five discrepancies between the assumptions and predictions of Ayotte and Skeel's model and empirically measured reality make us skeptical that the operation of the model reflects the operation of the reorganization system in the relevant period.

II. IS REFAILURE COSTLY?

Ayotte and Skeel present data showing that if the earnings of nine Delaware-reorganized refilers are calculated based on EBITDA, those companies were, on average, profitable in the years between their bankruptcies. We replicated that study using EBITDA figures for the nine companies from COMPUSTAT, and reached essentially the same conclusion. We found that, measured by EBITDA, the nine refiling firms earned annual profits averaging about 2.6 percent of prefiling assets per year. That figure is slightly higher than Ayotte and Skeel's.

Legal scholars have long assumed that bankruptcy is costly. From their study, however, Ayotte and Skeel conclude that the costs of refailure are so low that "refailure is not a useful measure of the effectiveness of a bankruptcy procedure." We consider that conclusion unwarranted both because EBITDA grossly overstates reorganized-firm earnings and because reorganized-firm earnings are only one element of the cost of refailure.

\[45\] Id at 461–62.

\[46\] We tested the relationship between EBITDA/Assets (one year and five year) and the length of time to reorganize using Pearson's R. We found no significant correlation (r = -0.002, p = 0.983 and r = -0.080, p = 0.437, respectively). It occurred to us that the relationship may not be linear or continuous, so we tested it again using Spearman Rank correlation. The result of that test indicated that five-year EBITDA/Assets is negatively correlated to days in bankruptcy (rho = -0.220, p = 0.031), while the one year ratio is not significantly correlated (rho = -0.043, p = 0.684). The data and statistical runs are posted at http://www.law.ucla.edu/erg/ (visited Oct 17, 2006).

\[47\] The data and statistical runs are posted at http://law.ucla.edu/erg/ (visited Oct 17, 2006).

\[48\] See Ayotte and Skeel, 73 U Chi L Rev at 447 (cited in note 2) (finding Average EBITDA/Assets at 2.3 percent and Average Adjusted EBITDA/Assets at 1.8 percent).

\[49\] See, for example, Claire A. Hill, Whole Business Securitization in Emerging Markets, 12 Duke J Comp & Intl L 521, 529 (2002).

\[50\] Ayotte and Skeel, 73 U Chi L Rev at 451 (cited in note 2).
A. Costs from Post-Confirmation Performance

In their review, Ayotte and Skeel present data on what they assert to be “two new measures of profitability that avoid the distortion caused by noncash charges.” The first is EBITDA—earnings before interest, taxes, depreciation, and amortization—as reported in COMPUSTAT. The second is Adjusted EBITDA, which they calculate as “sales less cost of goods sold and selling, general, and administrative expenses,” as reported in COMPUSTAT. We believe that these two measures, when properly calculated, are identical, and so we discuss only EBITDA.

EBITDA systematically overstates profits because it ignores depreciation, amortization, taxes, and the opportunity cost of invested capital (interest). While depreciation and amortization are not themselves cash expenditures, they represent the expensing of capital investment, which is a cash expenditure. Although capital expenditures absorb cash, they are in no way taken into account in calculating income, except as depreciation or write-offs. Eliminate depreciation and write-offs from the income statement—as one does in using EBITDA—and the effect is to ignore capital expenditures.

Postbankruptcy write-offs are often just what Ayotte and Skeel complain that they are: merely the recognition that a product, a plant, or a business format failed. But in just-reorganized companies, failed products, plant, and business formats are often replaced by new ones. Major capital expenditures may be required to bring the new ones into existence.

Similarly, routine depreciation does not require cash expenditures. But businesses that consume depreciable property regularly make regu-

51 Id at 447.
52 COMPUSTAT states that “[annual data item number 13] . . . represents Sales (Net) minus Cost of Goods Sold and Selling, General, and Administrative expenses before deducting Depreciation, Depletion and Amortization.” Standard & Poor’s Compustat (North America) User’s Guide Ch 5, at 171 (Standard & Poor’s 2000). This definition is the standard definition of EBITDA and also matches the Ayotte and Skeel’s definition of Adjusted EBITDA. To verify the identity of the two, we downloaded data item number 13 and data items number 12 (Sales (Net)), 41 (Cost of Goods Sold), and 189 (Selling, General, and Administrative Expense) to a spreadsheet, and placed the total of the latter three items beside the former. In the few cases where differences occurred, they were sufficiently small that rounding could account for them. The spreadsheet on which these data are recorded is posted at http://www.law.ucla.edu/erq/ (visited Oct 17, 2006). The data are on the “Download” worksheet, in columns M, N, P, Q, and R.

We think Ayotte and Skeel misinterpreted a COMPUSTAT code indicating two numbers have been combined as instead indicating that data were missing. As a result, they dropped as “missing data” every case in which COMPUSTAT combined cost of goods with selling, general, and administrative expenses. That alone, we think, produced the difference between their EBITDA and Adjusted EBITDA figures.
lar capital expenditures to replace that property. The cash outflow may be as great as—or greater than—the depreciation.

Spectravision is a case that exemplifies both kinds of capital expenditures. Spectravision’s business was the installation of pay-per-view equipment in hotel rooms. Spectravision showed no cost of goods sold on its income statement. It capitalized its expenditures for equipment as “hotel contracts” and then depreciated the contracts. In the second year after confirmation, Spectravision wrote off $196 million of these contracts—a transaction that Ayotte and Skeel would ignore. In the same year, Spectravision invested $57 million in cash to generate new hotel contracts. Ayotte and Skeel would ignore that expenditure as well. By the time Spectravision filed its second bankruptcy, the equipment installed under the new contracts was also proving noncompetitive, and the company was sold for a price that generated only about twenty-five cents on the dollar for creditors. By that time the $57 mil-

---

53 See Spectravision, Inc, Form 10-K for the Year Ending December 31, 1994, at 1 (“The Company is the leading provider of interactive in-room video entertainment services to the lodging industry.”).
54 Id at 27.
55 Spectravision states as a “significant accounting policy” that:

Video systems . . . are stated at cost. Capital leases are recorded at the inception of the lease . . . . Installed video systems include $28,249,000 and $14,765,000 of equipment, primarily televisions, under capital leases at December 31, 1994 and 1993, respectively. Depreciation and amortization, which includes the amortization of assets recorded under capital leases, is computed by the straight-line method over the estimated useful lives of the assets or the initial terms of the leases.

56 Id at 29 (showing that Spectravision wrote down hotel contracts by $196,356,000).
57 See Ayotte and Skeel, 73 U Chi L Rev at 447 (cited in note 2) (adjusting Spectravision’s income by removing the hotel contracts write-down).
58 Spectravision, Inc, Form 10-K for the Year Ending December 31, 1994, at 30 (showing a negative cash flow of $37,362,000 as “cost of in-process systems and capital expenditures”); id at 51 (“During 1994, the Company experienced a significant reduction of cash flows from existing hotel contracts, an increase in capital expenditures in support of contract renewals and significant capital expenditures for the deployment of the new STARPATH technology without any immediate cash flow improvement.”).
59 Spectravision emerged from its first bankruptcy October 29, 1992. Then
[j] In the fall of 1993, the Company and Electronic Data Systems (“EDS”) initiated the installation of a compressed digital video (“CDV™”), satellite delivered PPV system in the Company’s U.S. hotel sites . . . The Company [did] not [ ] intend to install more of these systems.

In the fourth quarter of 1994, the Company began installation of its new digital video on-demand service (“Digital Guest Choice”).
Spectravision, Inc, Form 10-K for the Year Ending December 31, 1995, at 2. Spectravision refiled in June 1995. Thus, Spectravision rolled out a new technology and abandoned it in the years between bankruptcy. The expense of that technology was never reflected in EBITDA.
60 At the end of 1995, Spectravision reported $633.2 million in debt. Id. On September 13, 1996, the Delaware bankruptcy court authorized sale of the company. Spectravision, Inc, Form 8-K for September 13, 1996, at 1. The sale price—expressly only as a proportion of the stock of a com-
lion capital expenditure had probably made the full cycle from payment to dust, but at no point along the way had it been captured in EBITDA. Ayotte and Skeel calculate Spectravision’s EBITDA as averaging 5.4 percent per year right before the decision is made to distress-liquidate Spectravision.\textsuperscript{61} The cause of Spectravision’s distress-liquidation obviously cannot be found in the company’s EBITDA.

Large public companies often have substantial tax net operating losses (NOLs) that they are entitled to carry forward into future tax years and apply against taxable income to reduce their federal corporate income taxes.\textsuperscript{62} The NOLs—which may be worth tens or hundreds of millions of dollars—must be applied within a fixed number of years or they expire.\textsuperscript{63} Thus, when a NOL-laden firm languishes in repeated bankruptcies, the NOLs age and ultimately expire. The firm incurs real, and sometimes measurable, losses. EBITDA ignores these losses and so understates the cost of refailure. Memorex provides an example. That company went to its grave taking hundreds of millions of dollars in NOLs with it.\textsuperscript{64}

Finally, EBITDA ignores the lost opportunity costs of creditors whose money is tied up in firms languishing between bankruptcies. The correct measure of that cost is what the creditor would have earned on its money in the alternative investment. In the case of Delaware reorganizations, the alternative investment was not liquidation but reorganization in a better bankruptcy court. That is, assuming no selection effect, if the companies that reorganized in Delaware had instead reorganized in Other Courts, the creditors would have been paid the amounts promised them in the first reorganization—including post-reorganization interest—in nearly all of the cases. Had the companies reorganized in Other Courts, the amounts promised to

\textsuperscript{61} Ayotte and Skeel, 73 U Chi L Rev 447 (cited in note 2).
\textsuperscript{62} See Michelle Arnopol Cecil, Reinvigorating Chapter 11: The Case for Reinstating the Stock-For-Debt Exception in Bankruptcy, 2000 Wis L Rev 1001, 1016 n 83 ("Net operating losses are often the most valuable assets of a financially troubled corporation, because they can shelter its income from federal income taxes when it emerges from bankruptcy.").
\textsuperscript{63} For example, a Memorex Annual Report stated the expiration dates of the company’s NOLs:

\textsuperscript{64} See id. On October 15 of that year, Memorex filed its third Chapter 11 case and announced its intention to liquidate. See Table 4.
the creditors may well have been smaller, and so the interest on those amounts would have been smaller. But EBITDA ignores whatever interest would have been paid.

In summary, Ayotte and Skeel's use of EBITDA to measure the accounting losses for the period between reorganization and refiling understates those losses in three correctable ways. It ignores capital expenditures, the loss of NOLs, and creditors' opportunity costs. These three losses are, however, probably only a small part of the total losses from failed reorganizations.

B. Other Refailure Costs

For Delaware's high refailure rates to be efficient in Ayotte and Skeel's model, the savings from cheap Delaware workouts must exceed the refailure costs resulting from Delaware's higher refailure rates. The model recognizes two kinds of refailure costs. The first is the refiling cost—designated $R$. The second is the losses between bankruptcies—designated $X$. As we have already shown, at Delaware's refiling rate, the refiling costs ($R$) alone exceed the savings from cheap Delaware workouts,\textsuperscript{65} and the manner in which Ayotte and Skeel calculate the losses between bankruptcies ($X$) ignores several important components of loss.

Ayotte and Skeel omit a third category of loss entirely: the damage to the business that results from the pressures that forced the company into its refiling. As a leading turnaround manager described it:

\begin{quote}
I think [refiling is] a crime practically. All the money spent on the first bankruptcy is lost. The morale and confidence of people is lost. The reputation and brand name, especially the consumer name, is lost. Vendors are very hesitant the second time around .... The chances of a company getting out [of bankruptcy] a second time are substantially reduced.\textsuperscript{66}
\end{quote}

This damage to the business is not fully captured by $R$ and $X$ in Ayotte and Skeel's model. $R$ includes only the cost of the second bankruptcy and is fixed irrespective of the second bankruptcy's success. $X$ includes only the losses between the first and second bankruptcy in cases where a second bankruptcy is filed. Three elements of damage from failure to resolve the debtor's problems in the first case are not included in either variable. The first is the losses that occur after the filing of the second case. The second is the increase in $R$ that

\textsuperscript{65} See text accompanying note 31.

results from the fact that the case is a refiling rather than an initial filing—essentially the costs of dealing with damaged morale and lost customers. The third is the reduced prospects for success in the second case.

To illustrate the importance of the damage ignored by treating a refiling as merely a repeat of the initial filing, consider the fate of the ten Delaware-reorganized refilers.\(^6\) Ayotte and Skeel report that, measured by EBITDA, the ten of these firms they address made profits equal to 2.3 percent of their prefiling assets. But, as shown in Table 4, four of the ten filed a third bankruptcy within five years of emerging from the second. Even more ominously, within five and a half years of their second filings, eight of the ten had made the decision to liquidate their businesses.\(^6\) A company that filed its first case in Delaware during Delaware’s period of ascendancy was in trouble, with a 42 percent chance of refiling. But if that company became part of the 42 percent that filed a second case—in Delaware or elsewhere—the company was pretty much doomed.

Seeing the outcomes of the Delaware refailures shown in Table 4, readers may be tempted to assume that the weakest companies chose Delaware reorganization. Recall, however, that after testing numerous possibilities, Ayotte, Skeel, and we have been able to find no preexisting difference in the firms choosing Delaware that might account for Delaware’s higher refailure rates. The evidence suggests that if these companies had filed their first cases in Other Courts, they would have suffered much lower refailure rates.

Thus the total costs of reorganization refailure are the direct and indirect costs of the second bankruptcy, the cost of goods sold and selling and general administrative expenses between bankruptcies, the capital expenditures between bankruptcies, the loss of NOLs from refailure delays, creditors’ lost opportunity costs from the end of the first case to the end of the second, and the probable complete destruction of the company. From this list, it should already be apparent that the total cost of Delaware’s refailures were far too high to be efficient.

---

\(^6\) Eleven Delaware reorganizations failed, but two were filed by the same firm (Memorex-Telex, NV).

\(^6\) Cherokee’s liquidation was not complete. The clothing manufacturer and importer stopped manufacturing and importing, and reduced its workforce from 345 to 15, but continued to operate successfully as the marketer and licensor of its brands. See Cherokee, Inc, Form 10-K for the Year Ending June 1, 1996, at 3.
TABLE 4: ULTIMATE FATE OF DELAWARE-REORGANIZED FIRMS THAT REFILED WITHIN FIVE YEARS

<table>
<thead>
<tr>
<th>Firm Name</th>
<th>Date/Court of First Confirmation</th>
<th>Date/Court of Second Filing</th>
<th>Date/Court of Third Filing</th>
<th>Date of Liquidation Announcement</th>
<th>Years from Second Filing to Liquidation Announcement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memorex</td>
<td>2/7/92 Delaware</td>
<td>2/11/94 Delaware</td>
<td>10/15/96 Delaware</td>
<td>10/15/96</td>
<td>2.7</td>
</tr>
<tr>
<td>Spectravision</td>
<td>10/29/92 Delaware</td>
<td>6/8/95 Delaware</td>
<td></td>
<td>12/20/95</td>
<td>0.5</td>
</tr>
<tr>
<td>Cherokee</td>
<td>6/1/93 Delaware</td>
<td>11/7/94 Delaware</td>
<td></td>
<td>5/5/95</td>
<td>0.5</td>
</tr>
<tr>
<td>Westmoreland Coal</td>
<td>12/16/94 Delaware</td>
<td>12/23/96 Denver</td>
<td></td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Harvard</td>
<td>8/10/92 Delaware</td>
<td>5/8/97 Delaware</td>
<td>1/15/02 Trenton</td>
<td>7/18/02</td>
<td>5.2</td>
</tr>
<tr>
<td>TWA</td>
<td>8/11/93 Delaware</td>
<td>6/30/95 St. Louis</td>
<td>1/10/01 Delaware</td>
<td>1/8/01</td>
<td>5.5</td>
</tr>
<tr>
<td>United</td>
<td>8/15/91 Delaware</td>
<td>2/22/96 Delaware</td>
<td></td>
<td>6/21/96</td>
<td>0.3</td>
</tr>
<tr>
<td>Grand Union</td>
<td>6/31/95 Delaware</td>
<td>6/24/98 Newark</td>
<td>10/3/00 Newark</td>
<td>10/3/00</td>
<td>2.3</td>
</tr>
<tr>
<td>Ithaca</td>
<td>Delaware</td>
<td>5/9/00 Newark</td>
<td></td>
<td>Summer 00</td>
<td>0.3</td>
</tr>
<tr>
<td>Morrison</td>
<td>Delaware</td>
<td>5/14/01 Reno</td>
<td></td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

Further research is necessary, however, to quantify these costs. Ayotte and Skeel assert that LoPucki's estimate of loss of 18 percent of the value of the company is "an extreme overstatement of any value loss attributable to the Delaware bankruptcy process." But when the final numbers are in, we think the percentage of loss will be much higher.

69 Ayotte and Skeel, 73 U Chi L Rev at 448 (cited in note 2).
70 LoPucki's estimates of refiled losses tend to be understated in part because the denominators in loss ratios were the assets reported by the companies before their first bankruptcies. The actual values of the assets may have been much lower. For example, LoPucki, Ayotte, and Skeel report Memorex losses as percentages of Memorex's $1.7 billion in reported prefiling assets. But even before Memorex's first bankruptcy, the company estimated the $1.7 billion to be $809 million
III. DO DELAWARE REORGANIZATIONS FAIL FROM INSUFFICIENT EARNINGS OR EXCESSIVE LEVERAGE?

In our earlier study, we found evidence that Delaware-reorganized companies failed from insufficient earnings. Using the standard accounting measure of profit, Delaware-reorganized companies averaged annual losses equal to 9 percent of prefiling assets, compared with annual gains of 1 percent for Other Court-reorganized companies. Using operating profit as the measure, Delaware-reorganized companies earned 1 percent per year compared with Other Court-reorganized companies’ 7 percent per year. The differences were statistically significant at the 0.002 and 0.006 levels respectively. We found virtually no evidence Delaware reorganizations failed from excessive leverage. Delaware-reorganized companies had higher leverage than Other Court-reorganized companies, but the difference was not statistically significant.

In their review, Ayotte and Skeel argue that we have it backwards: Delaware-reorganized companies fail from excessive leverage, but do not have lower earnings. In this Part we consider leverage and earnings separately, reaching the conclusion that Delaware-reorganized companies probably suffer from both excessive leverage and lower earnings.

A. Excessive Leverage

That Delaware-reorganized firms emerge with higher leverage is both a premise and a prediction of Ayotte and Skeel’s model. We previously reported that the Delaware firms emerged with higher lev-

in excess of the true value of those assets. Memorex Telex, NV, Form 10-K for the Year Ended March 31, 1992, at 13 (showing an $809 million “excess of cost over fair value” as of March 31, 1991). By the end of the second bankruptcy, those assets had been further written down to $268 million. Memorex Telex, NV, Form 10-K for the Year Ended March 31, 1996, at 28 (showing total assets in that amount). Thus, when Memorex made a capital expenditure of $12 million in 1993—an expenditure Ayotte and Skeel’s EBITDA calculations ignore—Memorex may have been spending 4 percent of its total assets. See Memorex Telex, NV, Form 10-K for the Year Ended March 31, 1994, at 28 (showing a $12 million cash outflow as a “Capital expenditure.”).

72 Id at 1971.
73 Ayotte and Skeel state:

Because the Delaware court (and the prepackaged case more generally) offers the possibility of a faster, and hence less costly procedure, our model predicts that

a) it will attract firms that are more likely to fail upon emergence, and

b) these firms will emerge with higher leverage than those that undertake a more costly restructuring.

Ayotte and Skeel, 73 U Chi L Rev at 443 (cited in note 2).
verage, but that the difference was not statistically significant.74 To explain that lack of statistical significance, Ayotte and Skeel suggest that firms seeking to emerge with high leverage camouflage it by overstating their fresh start asset values.75 In support of that suggestion, they cite a study showing that, on average, fresh start equity value is overstated (in comparison with market equity value) by about 4 percent76 and that the overstatements are greater among firms that face future financial distress.77 To investigate further, we compared the interest expense78 of the twenty-four Delaware-reorganized and fifty-five Other Court-reorganized firms that emerged from bankruptcy during Delaware’s period of ascendancy and for which COMPUSTAT data were available. We found that the ratio of interest expense in the year after emergence to assets at the end of the year before filing was higher for Delaware-reorganized firms.79 The difference was significant only at the 0.086 level,80 but was substantial. Interest expense was 5.0 percent of assets for the Delaware-reorganized firms, but only 3.8 percent of assets for the Other Court-reorganized firms. Thus, the asset-normalized interest expense of Delaware reorganized firms was 32 percent higher than the interest expense of Other Court-reorganized firms in the first year after confirmation.81

Based on these findings, we conclude that Delaware-reorganized firms emerged with higher interest expense and so probably had higher leverage.82 In our previous study, we did not find a statistically significant relationship between higher leverage and refiling, but we did find a statistically significant relationship between higher leverage and plan

74 See LoPucki and Doherty, 55 Vand L Rev at 1971 (cited in note 12) ("Thus, while the Delaware firms studied had higher postbankruptcy leverage, we cannot reject the possibility that the difference resulted from chance.").
75 See Ayotte and Skeel, 73 U Chi L Rev at 451 (cited in note 2), citing Reuven Leuhavy, Reporting Discretion and the Choice of Fresh Start Values in Companies Emerging from Chapter 11 Bankruptcy, 7 Rev Accounting Stud 53, 54–55 (2002) (suggesting that “firms with higher postbankruptcy leverage are significantly more likely to overstate their fresh start equity values”).
76 See Leuhavy, 7 Rev Accounting Stud at 69.
77 See id at 68.
78 COMPUSTAT data item 15.
79 We normalized by prefiled reported assets rather than postconfirmation reported assets to avoid the distortion in fresh start accounting values that we sought to excise. The reduction in assets from prefiled to postconfirmation averaged 20 percent for Delaware-reorganized companies and 22 percent for Other Court-reorganized companies.
80 The difference was not significant at all when the ratio was based on the average interest expense over the five years after emergence, p = 0.371. The data and statistical runs are posted at http://www.law.ucla.edu/ergl (visited Oct 17, 2006).
81 5.0 3.8 = 1.32.
82 An alternative explanation for Delaware-reorganized companies’ higher interest expense might be that Delaware-reorganized companies were riskier and so borrowed at higher rates of interest.
failure by refiling or distress merger.\textsuperscript{83} Thus, while the evidence is not compelling, we consider it plausible that Delaware firms emerged with higher leverage and that higher leverage contributed to their refailure.

B. Lower Earnings

To counter our findings that Delaware-reorganized firms have lower postconfirmation profits and operating profits, Ayotte and Skeel argue that Delaware-reorganized firms' greater leverage distorted their profits and operating profits.\textsuperscript{84} They present an empirical study showing no statistically significant difference exists between Delaware-reorganized firms and Other Court-reorganized firms with respect to a third measure of profits: EBITDA.\textsuperscript{85}

1. Delaware-reorganized firms' leverage distorts their profits.

Ayotte and Skeel's argument begins with the assumption that Delaware-reorganized firms emerge with greater leverage—higher ratios of debt to assets.\textsuperscript{86} To hide that greater leverage, the Delaware firms overstate the value of their assets. Because their assets are overvalued, Delaware-reorganized firms have higher depreciation and asset write-offs, which result in an understatement of the firms' operating profits.\textsuperscript{87} The increased depreciation and write-offs do not represent real losses because the values depreciated and written off never existed.

The overstatement of depreciation and asset write-offs also cause an understatement of the firms' profits. The higher interest charges resulting from the Delaware-reorganized companies' higher leverage add to this understatement. The interest expense is a real loss—it represents the time value of the creditors' investment—but Ayotte and Skeel nevertheless argue that the creditors' investment should not count in the comparison because the corresponding equity investments in Other Court-reorganized companies are not counted.\textsuperscript{88}

We do not quarrel with any of this. The standard measures of profit and operating profit are distorted by leverage. Where we part company with Ayotte and Skeel is when they conclude that the remedy for that distortion should be to ignore those measures in favor of

\textsuperscript{83} See LoPucki and Doherty, 55 Vand L Rev at 1969 (cited in note 12).
\textsuperscript{84} See Ayotte and Skeel, 73 U Chi L Rev at 450–51 (cited in note 2).
\textsuperscript{85} See id at 452.
\textsuperscript{86} See id at 450 ("Consistent with our model, LoPucki and Doherty find that Delaware firms do emerge with higher leverage.").
\textsuperscript{87} See id at 451.
\textsuperscript{88} See id ("Moreover, using [leverage-generated refailure] to compare across courts is biased against Delaware, whose process allows firms to emerge with higher leverage.").
EBITDA. The effect of doing so is to ignore not only the distortions, but also the real differences in depreciation, write-offs, investment opportunity costs, and taxes. The correct solution to this problem is not to fix on another distorted measure of postconfirmation income—EBITDA—but to make appropriate adjustments to the standard measure of profits to deal with its shortcomings. This might mean, for example, substituting capital expenditures for depreciation in appropriate circumstances.

2. Delaware-reorganized firms’ postconfirmation EBITDA is lower.

Examining COMPUSTAT data for 60 of the 102 firms that reorganized during the period of Delaware’s ascendancy, Ayotte and Skeel found that the postconfirmation performance of Delaware-reorganized firms was worse than the postconfirmation performance of Other Court-reorganized firms, but not significantly so. We replicated their study, examining COMPUSTAT data on 92 of the 102 firms. Although the difference in postconfirmation performance was greater in our sample, it remained below the level of statistical significance. Thus, we agree with Ayotte and Skeel that no statistically significant differences exist between Delaware-reorganized and Other Court-reorganized firms with respect to EBITDA.

Although the difference between Delaware- and Other Court-reorganized companies in postconfirmation EBITDA is not statistically significant, it is substantial. Ayotte and Skeel measure it at 9 percent. We measure it at 20 percent. The latter measurement is for substantially the entire universe of large public companies reorganized during the period of Delaware ascendancy. The lack of statistical significance merely indicates that differences this great are likely to arise by chance in a study of this nature. It neither negates the existence of the difference nor suggests it to be any smaller than measured.

Based on (1) the measured differences in postconfirmation EBITDA, (2) the likelihood of additional real differences in postconfirmation depreciation, write-offs, investment opportunity costs, and
taxes, and (3) the absence of further data, we think the best conclusion to draw is that lower earnings do contribute to Delaware’s higher refailure rates. Based on the measured differences in postconfirmation interest expenses, we conclude that excessive leverage also plausibly contributes to Delaware’s higher refailure rates. The evidence is not strong for either conclusion, and further research could result in a reversal of either or both. But on the evidence as it now stands, these conclusions are better than any others.

C. Why Does It Matter?

Ayotte and Skeel argue that leverage plays a large role in Delaware refailures and present empirical evidence suggesting that earnings may play no role at all. Their argument is somewhat persuasive and their empirical evidence basically sound. Yet if they are completely correct on both counts, they have proven their model inapplicable. Recall that in the first stage of their model, a selection effect causes the weakest, most difficult-to-reorganize companies to choose “less thorough” Delaware reorganizations that do “little to affect operations.” It is the anticipated weakness of these companies on emergence that motivates the parties to load them down with higher leverage to assure their quicker return to bankruptcy if necessary. But if Delaware-reorganized companies are inherently weaker on emergence, that weakness should manifest itself in an undistorted measure of post-reorganization performance. If EBITDA is indeed such a measure, and Delaware-reorganized companies manifested no weakness by EBITDA, it seems logical to question the model’s assumption that Delaware reorganization suffered from a selection effect. Yet without the assumption of a selection effect, (1) no reason existed for loading Delaware-reorganized companies down with additional leverage, and (2) the companies’ refailures cannot be attributed to the businesses’ weakness at filing. Responsibility for Delaware’s high refailure rates would then rest squarely with Delaware’s reorganization process.

Even if Delaware reorganization worked strictly in accord with Ayotte and Skeel’s model, it could not have been efficient. In Ayotte and Skeel’s story, the parties saddle the emerging companies with higher leverage and inflate the fresh start values. Ayotte and Skeel explain at length why the parties impose higher leverage, but offer no explanation for their inflation of the fresh start values of assets except to note that Lehavy “suggests that the rationale for [inflation of fresh

\[93\] Id at 444.
\[94\] Id at 439.
\[95\] See note 73.
start values] may be ... to achieve confirmation of a plan by overstating the firm's solvency." But if the parties are systematically deceiving the court regarding their leverage on emergence, they are also systematically deceiving the market. A deceived market is not efficient.

To our own theories, it does not matter whether Delaware-reorganized companies fail from excessive leverage or insufficient earnings. If we assume that the companies choosing Delaware reorganization are not weaker than the companies choosing Other Court-reorganization, it follows that the Delaware process is responsible for the added costs of refailure. Those costs would not have been incurred had the companies filed in Other Courts. It also follows that the Delaware bankruptcy court is responsible for the added costs of refailure. Even when all parties favor confirmation, the Bankruptcy Code still places responsibility for the feasibility of the plan on the court. The presiding judge must make an affirmative finding that "confirmation of the plan is not likely to be followed by the liquidation, or the need for further financial reorganization, of the debtor."

IV. THE PROBLEM OF DIP LENDER CONTROL

Part III of Ayotte and Skeel's review addresses the problem of bankruptcy forum shopping. It begins by recognizing that if one side is permitted to select the court, courts may bend the law in favor of that side to realize a judge's political preferences, to attract future cases, or both. That bending enables the case-placer and the court to externalize costs onto the nonconsenting party to the litigation. "It is this externalization of costs, without an effective check," Ayotte and Skeel correctly note, "that makes for inefficient forum shopping."

The problem is easy to recognize in two-party litigation. Large public company bankruptcy cases, however, typically involve thousands of parties, and it can be difficult even to say who selects the fo-
Formally, the debtor makes the selection. But in *Courting Failure* LoPucki maintains that the debtors’ managers, the debtors’ professional advisors, and the DIP lenders may all participate in the selection. Because Ayotte and Skeel address the managers and professionals separately from the DIP lenders, we do the same.

A. DIP Lenders as Case-Placers

Skeel was among the first to recognize the increased DIP lender power that marked Delaware’s ascendance. In Parts III and IV of their review, Ayotte and Skeel correctly describe the threat that DIP lenders pose to the reorganization process. DIP lenders are secured creditors who have—with respect to their postpetition loans at least—priority over all other creditors. Although the law prohibits them from taking so much control that they become the debtors’ decisionmakers, the competing bankruptcy courts have allowed them to take increasingly large degrees of control. The courts accomplish that by approving DIP lending agreements that contain draconian provisions regarding default and other matters and by enforcing those provisions.

Ayotte and Skeel fully recognize the potential for mischief in this kind of lending. The draconian provisions give the DIP lenders tremendous leverage over their debtors. Unless somehow restrained, DIP lenders may use that leverage to benefit themselves at the expense of other creditors or to promote agendas that are at odds with the goal of estate maximization. For example, a DIP lender may use its leverage to force a low-value liquidation in which the DIP lender is paid in full rather than to risk a higher-value reorganization in which

---

101 With respect to DIP lenders, LoPucki wrote:

A majority of large public companies need additional financing during the bankruptcy case. That money comes from debtor-in-possession (DIP) lenders (who might or might not already be creditors of the debtor) or suppliers. To attract cases, a bankruptcy court has to protect those new lenders along with the managers and professionals.

LoPucki, *Courting Failure* at 242 (cited in note 1).


103 As one court stated the doctrine:

A lender in Associates’ position will usually possess “control” in the sense that it can foreclose or drastically reduce the debtor’s financing. The purpose of equitable subordination is to distinguish between the unilateral remedies that a creditor may properly enforce pursuant to its agreements with the debtor and other inequitable conduct such as fraud, misrepresentation, or the exercise of such total control over the debtor as to have essentially replaced its decision-making capacity with that of the lender.

In re Clark Pipe and Supply Co, 893 F2d 693, 701 (5th Cir 1990).

the DIP lender would bear risk. A DIP lender may use its leverage as a postpetition lender to obtain priority for its prepetition claims, or, in combination with its information advantage, to acquire the debtor’s assets in a bankruptcy auction or a postconfirmation foreclosure.

After eloquently spelling out the nature and extent of the DIP lender problem, Ayotte and Skeel offer two solutions. The first is legislation “to prohibit a lender from serving both as DIP financier and as purchaser.” Ayotte and Skeel’s proposal is essentially an admission that DIP lenders and courts are going to externalize costs until someone stops them. Ayotte and Skeel’s second offered solution is that bankruptcy judges will prevent DIP lenders from overreaching:

[W]e are cautiously optimistic that bankruptcy judges will themselves solve the loan-and-control problem without the need for congressional intervention. We have already seen courts responding to the bootstrapping problem by prohibiting loan provisions that would give preferential treatment to a lender’s prepetition loan. As courts begin to focus on the distortions created by loan-and-control transactions, we expect to see efforts to protect the debtor’s other creditors from the risk of artificially low sale prices. At least, this might include a reluctance to approve § 363 sales that are opposed by the creditors committee; ideally, bankruptcy judges will go further and move toward a blanket or near-blanket prohibition against purchase of the debtor’s assets by the debtor’s postpetition financier.

Ayotte and Skeel’s error is in assuming independent, unbiased bankruptcy judges. The main point of Courting Failure is that the judges who preside over large public company bankruptcy cases are neither independent nor unbiased. DIP lenders have the power to select the courts in which they lend. Some courts—including Delaware—are competing for cases. Courts can only get DIP lenders’ cases if their decision patterns are at least as favorable to DIP lenders as the most favorable competing court. Thus court competition makes reform against the interests of DIP lenders impossible. Even if the Delaware

105 See, for example, Jay Lawrence Westbrook, The Control of Wealth in Bankruptcy, 82 Tex L Rev 795, 845 (2004) (“[G]reat gaps separate liquidation value, market value, and going-concern value, but the secured party has no incentive to realize more than the value that will pay the secured debt in full.”).
106 Ayotte and Skeel, 73 U Chi L Rev at 466 (cited in note 2).
107 Id at 466-67.
108 Elsewhere, LoPucki states:
For the past year, I have been showing bankruptcy professional audiences [a] list of trends in big case reorganization practice . . . and pointing out that all of them are trends in favor of the interests of the case-placeholders. I then challenge those in the audience to name one
bankruptcy court wanted to make the reforms Ayotte and Skeel propose, it could not. The case-placers would take their business elsewhere.

Ayotte and Skeel argue that the courts have already put restrictions on DIP lenders' ability to crosscollateralize. \(^1\) The only case they cite, however, was decided by the Fifth Circuit Court of Appeals. The competing bankruptcy courts do not openly challenge such decisions because such challenges might prompt Congress to end the competition. \(^2\) This is particularly the case where, as here, the competing bankruptcy courts have found other ways to give case-placers the advantages the appeals courts would deny them.

In place of crude crosscollateralization, for example, competing courts permit rollovers. In a rollover, the debtor pays the DIP lender the amount of its prepetition loan and the DIP lender returns the money to the debtor as a postpetition loan. The effect is essentially the same as if crosscollateralization had been permitted, but the transaction does not run afoul of the rule prohibiting crosscollateralization.\(^3\)

**B. Debtor’s Managers and Attorneys as Case-Placers**

The control that debtors’ managers and professionals exert over the placement of cases creates different kinds of problems. The managers will prefer courts willing to leave them in unfettered control of their companies, release them from liability for their own wrongdoing, approve bonuses, and not inquire too deeply into their motives for any trend in big case reorganization practice that has been moving against the case-placers. Of course, no one can. As long as the competition continues, such a trend on any issue of importance to the case-placers is impossible.


\(^1\) See Ayotte and Skeel, 73 U Chi L Rev at 465 (cited in note 2) ("Although crosscollateralization is not explicitly prohibited by the Bankruptcy Code, for instance, courts rarely permit it.").

\(^2\) A bill sponsored by Senator John Cornyn (R-Tex) that would do so remains pending in the Senate. See Fairness in Bankruptcy Litigation Act of 2005, S 314, 109th Cong, 1st Sess (Feb 8, 2005). Ultimately, the appellate courts can exercise some degree of control over the bankruptcy courts and thus influence the race to the bottom that is now occurring. In the context of interstate competition for incorporations, Professor Mark Roe has argued that “there cannot be a pure race in a federal system where the federal player can take the issue away from the states.” See Mark Roe, *Delaware’s Competition*, 117 Harv L Rev 588, 609 (2003). What Roe asserts with respect to state competition is to some degree true of bankruptcy court competition. The threat of appellate court interference, congressional action, or public response to the bankruptcy courts' competitive moves renders the bankruptcy court competition impure. But such threats have so far merely altered the conditions of the bankruptcy court competition. The competition continues impurely.

particular course of action. The attorneys prefer courts that approve generous fees and do not complain about conflicts of interest.

Ayotte and Skeel recognize these problems, but claim the existence of "several critical checks on the ability of managers and their attorneys to seek a venue that promotes their interests at the expense of creditors and other constituencies." They mention only three: DIP lenders, creditor voting, and open auction procedures in sale cases.

1. DIP lenders as a check.

Ayotte and Skeel argue:

The banks that serve as DIP financers aren't in the habit of simply throwing money away. It is therefore unlikely that they would sit idly by while a debtor's managers and their attorneys directed the case to a venue that let managers stick around when they should be ousted and paid the debtor's bankruptcy lawyers and other professionals exorbitantly large amounts of money.\(^{113}\)

What Ayotte and Skeel miss is that the DIP lenders' incentives are not to protect the entire estate, but only enough of the estate to insure their own repayment. With respect to sales of collateral, Professor Jay Westbrook notes that "great gaps separate liquidation value, market value, and going-concern value, but the secured party has no incentive to realize more than the value that will pay the secured debt in full."\(^{114}\) Precisely the same is true in reorganizations. Because DIP lenders have priority, the marginal dollar paid to managers or professionals comes not from the DIP lenders share, but from the shares of other constituencies. DIP lenders should be happy to trade other constituencies' expectancies for the help of the managers and professionals in maximizing the DIP lender's recovery. In a system where courts compete, the incentives of the managers, attorneys, and DIP lenders are to make such corrupt trades and, hand-in-hand, take the cases to the courts most likely to let them get away with it.

2. Creditor voting as a check.

Ayotte and Skeel concede that "[b]ecause creditors do not vote until the debtor proposes a reorganization plan, the vote does not protect them from decisions that favor the debtor's managers or attorneys at their expense earlier in the case."\(^{115}\) What Ayotte and Skeel fail to

\(^{112}\) Ayotte and Skeel, 73 U Chi L Rev at 456 (cited in note 2).

\(^{113}\) Id at 457.

\(^{114}\) Westbrook, 82 Tex L Rev at 845 (cited in note 105).

\(^{115}\) Ayotte and Skeel, 73 U Chi L Rev at 457 (cited in note 2).
mention is that there are virtually no decisions of any importance made later in the case. When the plan comes up for a vote, the court has already been selected, the DIP loan approved, and the decision on disposition of the assets made. Typically, the creditors’ choice is to take what is offered them (which ends the case), or reject it (which results in continuation of the case in the same court).

Apparently trying to put a good face on this bad fact, Ayotte and Skeel note that Delaware cases are faster and so the creditors’ choice comes earlier. We agree. Ayotte and Skeel then assert that such an earlier vote reduces the “debtor’s implicit threat to drag the case out.”116 We disagree. Delaware cases move faster only when the parties in control—typically the case-placers—choose to have them move faster. If those parties choose to delay, all indications are that the Delaware court will grant as many extensions of exclusivity as the debtor requests.117 Not only has Delaware been home to many of the shortest cases; it has also been home to many of the longest.118 Delaware’s commitment is not to speed, but to flexibility with regard to speed.

The fact that creditors will vote at the end of a case gives the case-placers no incentive to select a court that will protect the interests of the creditors. Once the case-placers select a court, that court will resolve the case. No vote of the creditors can alter that reality. Hence the case-placers’ incentives are to select the court that will most strongly favor the case-placers’ interests and least protect those of the other creditors. That selection maximizes the incentives of the general creditors to vote in favor of any given plan, because it makes the general creditors’ alternative to plan confirmation—continuing the case in the same court—less attractive.

3. Open auction procedures in sale cases.

Ayotte and Skeel argue that:

So long as the managers themselves (or the DIP financiers, as discussed in the next Part) are not the buyers of the assets, open auction procedures seem likely to ensure that the assets are

---

116 Id.
117 Although they have not completed a formal study, the authors are aware of no Delaware large public company case in which the court has refused to extend exclusivity.
118 For example, Columbia Gas remained pending for more than four years in Delaware; Levitz Furniture and Integrated Health Services each remained pending more than three years. For all cases filed since November 1, 1990, 9.8 percent of those that reached confirmation (30 of 307) took one thousand days or more to do so. The corresponding figure for Delaware is 5.7 percent (11 of 193). The data are posted at http://www.law.ucla.edu/erg/ (visited Oct 17, 2006).
bought by the highest valuing bidder. In effect, an open auction is a substitute for a direct vote by creditors.\(^{119}\)

Ayotte and Skeel themselves note, however, that manager and DIP financers are themselves sometimes the buyers of the assets. How often they are buyers is impossible to say because the courts do not force disclosure of the ultimate purchaser. Nor are the auctions particularly open. The case-placers take their sales to courts that do not require that the auction take place in open court. Typically, the auction is held in the offices of the debtor’s attorneys with only qualified bidders permitted to attend. Transcripts are sketchy and may never be made public.\(^{120}\)

Even if the sale is to an outsider, the case-placers may have both the incentive and the opportunity to favor someone other than the highest valuing bidder. Buyers often retain incumbent management and pay signing bonuses. Buyers may also need to negotiate with a DIP lender that has a stranglehold on the business. One buyer may offer the DIP lender more than another, confusing the auction and skewing incentives.

Lastly, an auction, no matter how open or effective, is no assurance that the sale price exceeds the value the business would have had in reorganization. Managers may choose sale over reorganization because they can reap both retention bonuses from the estate and signing bonuses from the buyer, or because sale will trigger a particularly advantageous severance provision of their employment agreement.

IV. CONCLUSIONS

From 1990 through 1996 the Delaware bankruptcy court went from judicial backwater to near monopoly of the large public company bankruptcy business. Congress’s recent award of four additional bankruptcy judgeships to the Delaware court virtually assures that court’s continued prominence. To advocates of regulatory competition, the Delaware bankruptcy court is a success story.

The abysmal record of the companies reorganized during Delaware’s period of ascendancy, however, casts a pall over the celebration. Failure rates two to seven times higher than those in Other Courts are difficult to justify. That did not prevent Ayotte and Skeel from trying.

The economic model Ayotte and Skeel propose does not provide the promised justification. First, the model relies on a selection effect, but no evidence of such a selection effect exists. Ayotte and Skeel do not even identify any suspect variables for testing. Second, the model relies

---

\(^{119}\) Ayotte and Skeel, 73 U Chi L Rev at 458 (cited in note 2).

\(^{120}\) See LoPucki, Courting Failure at 167–80 (cited in note 1).
on cost savings from the initial Delaware filings to outweigh the added costs of the Delaware refilings. But the best empirical estimates of the savings from the initial Delaware filings are so small and numbers of refilings so large that the offset is mathematically impossible. In addition, Ayotte and Skeel's model predicts a number of characteristics in the pattern of refilings that are not present in the actual pattern of refilings.

The model's principal value is in showing us what it would take to defend the Delaware court's record. The first is proof that Delaware suffered from a selection effect. That is, the companies that chose the Delaware court were in some respect more difficult to reorganize successfully. The second is proof that the costs of refailure are negligible. Delaware's defenders are unlikely to be able to produce either. Delaware's eleven refilings from twenty-six cases are likely just what they appear to be: a catastrophic failure of Delaware's laissez-faire reorganization process.

Ayotte and Skeel's efforts have, nevertheless, made important contributions to our understanding of the reorganization process. Principal among them is their exposition of the complex manner in which leverage affects the variables by which reorganization success and failure are measured. We have already sought funding for a project that would apply their insights to the development of better measurement techniques. In addition, Ayotte and Skeel's discovery that the Delaware-reorganized companies had postconfirmation EBITDA nearly equivalent to that of Other Court-reorganized companies suggests that another shoe is yet to drop (though we cannot see how that shoe could change the overall picture).

Skeel was among the first to recognize the significance of the increasing DIP lender control in Chapter 11 cases. Ayotte and Skeel have a sophisticated understanding of the skewed incentives present and the serious threat to the functioning of the Chapter 11 process those incentives constitute. Their "cautious[] optimi[sm] that bankruptcy judges will themselves solve the loan-and-control problem"\(^{121}\) is for that reason all the more puzzling. What they fail to grasp is that the bankruptcy courts can do nothing to rein in the DIP lenders as long as the courts must compete for the DIP lenders' business.

The Delaware bankruptcy court's awkward, yet successful grab for the big case bankruptcy business is a dramatic counterexample to the case for regulatory competition. The Delaware bankruptcy story is one of a court that took bold, decisive action to serve the parochial interests of the case-placers and quickly and decisively won a new, lucrative industry for the state. The court broke more than a few com-

---

\(^{121}\) Ayotte and Skeel, 73 U Chi L Rev at 466 (cited in note 2).
panies along the way, but has since masked its illgotten gains with the trappings of respectability. As LoPucki showed in the prologue to Courting Failure, the story is reminiscent of the manner in which Delaware captured the incorporation industry ninety years earlier.