**American Bar Association**
**27th Annual Forum on Franchising**

---

# THE ROLE OF RISK ANALYSIS IN DISPUTE AND LITIGATION MANAGEMENT

**Robert B. Calihan**
**Nixon Peabody LLP**
**Rochester, New York**

**and**

**John R. Dent**
**Hilton Hotels Corporation**
**Beverly Hills, California**

**and**

**Marc B. Victor**
**Litigation Risk Analysis, Inc.**
**Kenwood, California**

October 6 – 8, 2004
The Sheraton Wall Centre Hotel
Vancouver, British Columbia

---

©2004 American Bar Association

TABLE OF CONTENTS

Page

# THE ROLE OF RISK ANALYSIS IN DISPUTE AND LITIGATION MANAGEMENT

Litigation is generally recognized as being costly, unpredictable and inefficient – the antithesis of profitable business activity. Yet it is also a fact of life that any business activity, including franchising, inevitably involves litigation. Risk analysis is a powerful tool for maximizing the efficiency with which franchisors and franchisees conduct litigation – or any other form of dispute resolution. By maximizing the efficiency of dispute management, franchisors and franchisees can reduce their relative costs while increasing their returns – whether these returns are measured in terms of maximizing the size of a favorable judgment or settlement, minimizing the size of an unfavorable judgment or settlement, or achieving some other objective.

Section I of this paper reviews some of the important factors that make litigation so costly and work against conducting litigation or other forms of dispute resolution efficiently.

Section II presents the art and science of risk analysis, and explains how it can result in more effectively managed, and less costly, litigation. In its simplest form, risk analysis assigns quantitative probabilities predicting the likelihood that various litigation events will occur. Those events in turn are ultimately expressed in terms of recoveries (if plaintiff) or payments (if defendant). In addition, a good risk analysis will also incorporate the costs (e.g., attorneys' fees and other consequential litigation costs) of pursuing or defending the action.

Section III of this paper addresses litigation budgets and forecasts, and how they relate to the broader topic of risk analysis. Because litigation costs can dramatically affect the total recovery or payment in any dispute, they should generally be considered as part of a risk analysis. The reliability of a risk analysis, therefore, will depend in part on the reliability of the budget it incorporates. Section III suggests a framework for forecasting and managing when and how costs will be incurred, and discusses how those costs affect a risk analysis.

Finally, Section IV discusses some practical implications of performing – or not performing – risk analyses, including client relations issues, implications for financial reporting, and discoverability.

## I. THE PROBLEM: LITIGATION IS COSTLY, INEFFICIENT AND UNPREDICTABLE

Litigation is a recognized cost of doing business in our society. All businesses, from the largest corporations to the smallest franchises, inevitably find themselves embroiled in disputes, some of which result in litigation, others in arbitration or mediation. Like all businesses, franchisors and franchisees can become litigants in disputes over contracts, goods or services, advertising, real estate, intellectual property, wage and hour issues, torts, antitrust, and even securities fraud cases.[1] Franchisors and franchisees also face the unique prospect of intra-system disputes between themselves. All of these disputes can be quite costly.

[1] Like all publicly traded companies, publicly traded franchisors and franchisees are potentially subject to securities fraud class action cases. In 2002, one quarter of the corporations that constituted the Dow Jones Industrial Average were a defendant in at least one securities fraud class action suit, and one-in-eight of the corporations that constituted the Standard and Poor's 500 Index were named defendants in a class action securities fraud case. Such class action claims can present massive exposure. In 2003, it was estimated that

*(Footnote continued on next page)*

Direct litigation costs are easily catalogued. Attorneys are expensive, not to mention the costs of experts, support staff, court reporters, etc. In high stakes "bet the company" litigation between large corporations, litigants can easily find themselves paying millions of dollars a month to outside counsel. Small cases can result in litigation costs that exceed the value of the claim. The significance of attorneys' fees can pale when compared to significant adverse judgments.[2]

In sum, it is beyond dispute that litigation imposes significant costs on defendants in terms of attorneys' fees, unfavorable judgments, and settlement payments. Litigation may also impose significant costs on plaintiffs who must incur substantial up-front expenses for only a chance of recovering damages.

But there is more. Litigation – and the threat of litigation – gives rise to significant indirect costs. While far more difficult to quantify, those costs can be substantial. Litigation, particularly at its early stages, is almost always emotionally charged, especially for the individuals whose conduct is at issue in the dispute. The emotional element of litigation can be extremely distracting, and divert attention from the conduct of the business. Litigation diverts resources, as employees with important responsibilities for running the business are forced to spend time searching for documents, preparing for and participating in depositions, meeting with lawyers, and testifying at trial. Litigation – and the threat of litigation – can also result in overly conservative risk avoidance business conduct. Businesses involved in serious litigation may elect not to pursue particular business opportunities because of concerns that a new course of conduct might adversely impact the outcome of the litigation.[3] For example, a franchisor that is busy defending claims that recent changes in the franchise system unfairly discriminated against franchisees may be reluctant to impose additional changes in the system no matter how compelling the business case may be for such changes – and no matter how clearly the franchise agreement entitles the franchisor to make those changes. A franchisee that is a defendant in a royalty dispute with its franchisor may elect not to invest additional time and money in that business.

A particularly pernicious consequential cost of litigation is the tendency some litigations have to spawn additional lawsuits against the same defendant. This is often a frequent concern of franchisors that may be impacted by the prospect of one franchisee's lawsuit leading to additional franchisee lawsuits – particularly because the initial lawsuit will probably be disclosed to the world in Item 3 of the franchisor's next Uniform Franchise Offering Circular.

Finally, there is the damage that litigation causes to the relationship between the litigants. This is a particularly serious concern in franchisor-franchisee litigation.

---

*(Footnote continued from previous page)*

at least 25 securities fraud class actions then on file would settle for in excess of $500 million each. Adrien Lewthwaite, *Lawsuits Increasingly Target Directors*, INSURANCE DAY, Jan. 9, 2003, at 1.

2 *See, e.g., Broussard v. Meineke Discount Muffler Shops, Inc., et al.*, 958 F. Supp. 1087 (W.D.N.C. 1997), *rev'd* 155 F.3d 311 (4th Cir. 1998) (plaintiff franchisees awarded $390 million judgment against franchisor at trial; reversed on appeal).

3 *See* The Public Policy Institute of New York State, Inc., *An Accident and A Dream*, § 1, n. 8, (Mar. 19, 1998) *citing* Henry Holzer, *Product Liability Law: The Impact on New Businesses*, (1990), *available at* http://www.bcnys.org/ppi/acccont.htm.

Despite all of these substantial direct and indirect costs, traditional litigation management does a remarkably poor job of trying to quantify them. That is particularly surprising given the great paradox of civil litigation: in the final analysis, it is in some sense an entirely consensual activity. Litigation only occurs when both the plaintiff and defendant "agree" that the direct and indirect costs of litigating are outweighed by the perceived benefits of the litigation. At the outset of any litigation, the plaintiff has calculated (perhaps inaccurately) that what it is likely to gain from the litigation outweighs the direct and indirect costs of asserting and pursuing its claims. Similarly, the defendant has calculated (also perhaps inaccurately) that the costs of defending against the plaintiff's claims are lower than the costs of acceding to the plaintiff's initial demands. The prevalence of commercial litigation reflects the frequency with which plaintiffs and defendants initially "agree" that the benefits of litigating between themselves outweigh the costs.

At some point, however, a significant portion of all commercial litigations settle short of trial.[4] Thus, while all litigations start consensually by the plaintiff and the defendant "agreeing" that litigating is rational, most of those litigations also end consensually, by the plaintiff and defendant agreeing that a particular settlement is more beneficial than continued litigation. How do they get to there?

Theoretically, businesses should be able to calculate the point at which it makes economic sense to settle rather than litigate as easily as they make any other economic decision. Historically, however, there have been numerous obstacles to performing good risk analyses in the litigation context. Among them:

- Outside counsel are often reluctant to assess risks as being at the high and low ends of the probability spectrum. Think of the expressions outside counsel typically use to describe the likelihood of a litigation outcome: "More likely than not," "the odds are good," "strong case." Rarely does a client hear "it's a sure thing," or "it's a slam dunk." These expressions are used – and not used – because trial counsel tend to be uncomfortable with predicting risks as being at the extreme ends of the 0-100% risk spectrum. Thus, it is unusual for trial counsel to assess the probability of a litigation outcome at more than 70% likely or less than 30% likely. The vast majority of probability risk assessments tend to clump within the 30-70% probability range. Put another way, trial counsel appear generally comfortable with making assessments of an event being more likely than not, which is to say a greater than 50:50 probability. It is virtually unheard of, however, to hear a risk assessment of 90:10 – which is to say "close to a slam dunk."

  This is perhaps not surprising. It is difficult, after-the-fact, to criticize a trial counsel who estimates that the likelihood of a certain litigation event occurring is "more likely than not." A person who has made such a prediction will not appear to have been far wrong if the predicted event does not occur. It is far riskier to make a 90:10 prediction. When an

[4] *See* Hope Viner Samborn, *The Vanishing Trial: More and More Cases Are Settled, Mediated or Arbitrated Without a Public Resolution*, 88 A.B.A.J. 24 (October 2002). The author discusses a widely cited study from Marc Galanter that found the number of cases resolved by trial in 2001 was only 2.2% of all cases filed in federal court. *See also* Beverly J. Hodgson, *Who's the Alternate Now?,* Conn. Law Tribune, March 8, 2004, at 2 ("… a recent survey of federal district courts reveals that just 1.8% of civil cases go to trial." and "In the state courts, the estimate is that just under 5 percent of the civil cases filed are ever tried.").

event that one has predicted will occur with a 90% "close to a slam dunk" probability does not occur, the prediction will appear to have been highly inaccurate.

- The impact of this phenomenon is compounded when, as is invariably the case, assessing the likelihood of a litigation outcome requires assessing the likelihood of a series of events all occurring. Take, for example, the simple hypothetical of predicting that plaintiff franchisee will (i) survive a motion to dismiss; (ii) survive a summary judgment motion; and (iii) prevail at trial. If trial counsel assesses the risk of each of those events occurring as "more likely than not," with more likely than not meaning 60:40, the likelihood of an ultimate favorable outcome for the franchisee is 22% (.6 x .6 x .6 = .216). Thus, by adhering to more moderate "more likely than not" predictions of various events occurring, trial counsel has advised the franchisee of just a one-in-five chance of an ultimate victory. A very different outcome results where trial counsel is willing to take a far more aggressive stance when warranted, for example, by predicting a 90% likelihood of prevailing at each one of the three steps. In that case, the likelihood of an ultimate favorable outcome for the franchisee is 73% (.9 x .9 x .9 = .729). There is obviously a profound difference between advising a client that he has a seven-in-ten chance of prevailing instead of a one-in-five chance. Thus, when predicting the probability of a series of events occurring, as is almost always the case in analyzing litigation outcomes, any uncorrected tendency to favor unrealistically conservative probabilities can have a material impact on the risk assessment.

- While there are various personality profiles of highly effective litigators, many highly effective litigators are passionate advocates who passionately embrace their clients' belief in the absolute rightness of their position. It is not at all clear that such individuals – without proper encouragement and training – can be equally effective at making realistic risk analyses. Indeed, many clients start questioning their advocate's commitment to the client's cause when that advocate starts engaging in a dispassionate analysis of the dispute or starts arguing the opponent's position too forcefully.

- Litigators and businessmen tend to speak different languages, professionally, and think in different terms, professionally. It is frequently difficult to translate litigation risks into business risks without much being lost in the translation.

- Risk analysis requires effective cost forecasting, but client dynamics often discourage it. Many outside counsel believe that clients faced with serious claims are generally more interested in knowing "Can you win it for me?" than "Can you litigate it for me in a cost-effective manner?" Successful trial counsel, after all, are generally known for winning cases, not for controlling costs or accurately assessing the value of claims. This is not to say that trial counsel have not become keenly aware of the need to try to control litigation costs. To the contrary, most trial counsel understand their clients' desire to control litigation costs, but the drive to win is generally stronger than the drive to control costs.

- Finally, risk analysis requires a degree of comfort with arithmetic that many attorneys lack. This unease discourages them from ever embracing the concept, despite the strong interest shown by most business clients.

But it is impossible to conduct litigation efficiently – i.e., to make a rational decision whether to settle or litigate, and if to litigate, how much and where to invest in the litigation, and keep the client from being surprised – without being able to understand, realistically quantify,

and meaningfully communicate litigation risks and costs. That is the purpose of risk analysis and the subject of this paper.

## II. RISK ANALYSIS APPLIED TO LITIGATION

### A. Principles of Risk Analysis – An Overview

#### 1. Hypothetical

*The discussion in this paper is based on the following hypothetical. It takes place in the future, although the law has been magically frozen in time as it stood in October 2004.*

In 2010, researchers at the Institute of Healthy Stuff (IHS) announced an amazing discovery: dirt is good for you. Ingested in moderation (about two cups a day), good old American topsoil reduces heart disease, lowers cholesterol, builds muscle mass, and raises the average person's IQ by about ten points.

The announcement triggered a dirt fad. All across America, restaurants began selling dirt burgers, dirt shakes, dirt omelets, dirt crepes, and dirt ice cream. By far the most successful venture, however, was "Dirty Larry's." Founded by the IHS chief researcher Dr. Larry Jones, Dirty Larry's deep-fried dirt became a national sensation. Within a few short years, Dirty Larry's franchises dotted the landscape in numbers not seen since the coffee craze a decade earlier.

In 2014, however, researchers at the Centers for the Obvious made another announcement: dirt tastes lousy. Not only that, but eating it causes indigestion, acne, and halitosis, and in one limited rat study, some cases of kidney failure, blindness, and mad cow disease. American consumers abandoned dirt overnight in favor of the next health craze, dry martinis.

Joe Clean was a Dirty Larry's franchisee. Joe signed up in mid-2011, when the Dirty Larry's empire was growing exponentially. Some of his franchise agreement terms seemed a little onerous – such as the royalty fee of 50% of gross sales, liquidated damages equal to five times his personal adjusted gross income for the previous year (or $2 million), and a 20-year term – but Dirty Larry's stores were a gold mine and Joe figured that he couldn't go wrong. So he invested the $5 million necessary for some prime real estate (i.e., inventory), earth-moving equipment and a fleet of dump trucks.

By mid-2014, however, Joe's store was struggling to stay afloat, and he was hopping mad at Larry. When Joe opened his store, there wasn't another Dirty Larry's in the entire city, but within a year there were three other stores on the same block. Even worse, there was talk in the press that Larry's initial research had revealed from the beginning some of the potential health problems (albeit, the less serious ones), but that neither Larry nor anyone else at IHS said anything about that when announcing their amazing discovery back in 2010.

Larry was not sympathetic. Joe's store had always been one of the worst performers in the system, and Larry believed that Joe's struggles were due primarily to bad management, Joe's lethargy since coming into a very big inheritance, and the country's renewed weakness for gin. After Joe missed four quarterly payments (totaling $1 million), Larry terminated Joe's franchise and sued him for the past due amount plus the liquidated damages ($2 million). Joe counterclaimed with one count of fraud in the inducement (seeking rescission and restitution of

his initial $5 million investment, plus punitive damages) and one count of breach of the covenant of good faith and fair dealing (seeking lost past and future profits).

### 2. How Lawyers Value Cases

How would counsel for Joe and Larry evaluate their respective positions? Even if they had never been formally schooled in risk analysis – i.e., the use of decision trees and probability arithmetic – we submit that they would nonetheless go through the basic steps of a risk analysis to arrive at their respective case values. Haven't good attorneys always (i) formed opinions about the likelihood of success on each claim, (ii) estimated the range of potential damages that a jury might award for each, and then (iii) somehow "combined" these probabilities and potential awards to arrive at a case value and make their pre-trial, trial, and settlement decisions?

In other words, can't you hear Larry's counsel advising her client that "the odds are great that you can terminate Joe's franchise based on the four missed payments," and that "our judges aren't likely to follow that nutty California case[5] and refuse to enforce your liquidated damages provision," and that "the judge will hopefully find this specific $2 million provision enforceable – but at the worst, Joe will have to make good on the $1 million of missed payments."

And wouldn't you expect Joe's counsel to have opined that she's got "some chance of convincing the jury there was fraud in the inducement," which would result in return of the $5 million that Joe invested plus "maybe punitive damages of an equal amount – and possibly even a multiple of that," or a "good shot of proving a breach of the implied covenant of good faith and fair dealing," which would result in an award of lost profits that "could be significant."

But how good a job will either attorney do at "combining" these various opinions to reach conclusions about case value? Most lawyers admit that this is one of the most difficult tasks they face. That is, although their education and experience have trained them to spot the issues, think about the strength of each side's evidence, and have a feel for the range of potential jury verdicts, most have still never figured out the proper way to "roll all the pieces together." As a result, it is easy to overvalue or undervalue cases – and by significant amounts.

A rigorous risk analysis allows cases to be valued more appropriately by providing counsel with the means to (i) identify and capture the relationships between the various liability and damages issues (e.g., if Joe prevails on either of his counterclaims, can Larry still prevail on his case-in-chief?), (ii) convert their opinions into numeric probabilities (e.g., is a "good shot" closer to 35%, 50%, 65%, or something else?), (iii) and properly weight the potential outcomes by their probabilities of occurring.

### 3. How Businesses Value Risky Ventures

When did lawyers first recognize the relevance of probabilities for the valuation of lawsuits? The answer isn't clear, but it's not hard to imagine that it wasn't too long after the first commercial case was filed. Surely the attorney received a little prodding from his business client, who undoubtedly asked – and more than once – "How likely are we to win?"

---

[5] *PIP v. Sealy,* 43 Cal. App. 4th 1704 (2d App. Dist. 1996).

Businesses have long valued risky situations by weighting the potential outcomes by their probabilities of occurring, and then selecting the strategy with the highest positive (or lowest negative) "probability-weighted" average.[6] At least two industries owe their long existences to the soundness of making decisions based on such probability-weighted averages: the insurance industry and the gambling industry. And while a mathematician could prove that continually making decisions based on expected values will maximize one's wealth (or minimize one's losses) over time, Damon Runyan (1880-1946) said it best: "It may be that the race is not always to the swift, nor the battle to the strong – but that is the way to bet."

So how would a rational businessperson value Joe's claims? To make things simple at first, let's assume that Joe hasn't missed any payments (or been terminated or sued by Larry), but has brought suit to recover his losses (but not punitive damages). Assume that his attorney, Sarah, feels Joe has a 60% chance of winning and a 40% chance of losing.[7] If he wins, Sarah's best guess is a 20% chance that the jury will award in damages the full $5 million Joe claims to have lost, but an 80% chance it will award only $2 million. Figure II-1 captures the liability and damages uncertainties in a diagram known as a "decision tree."[8]

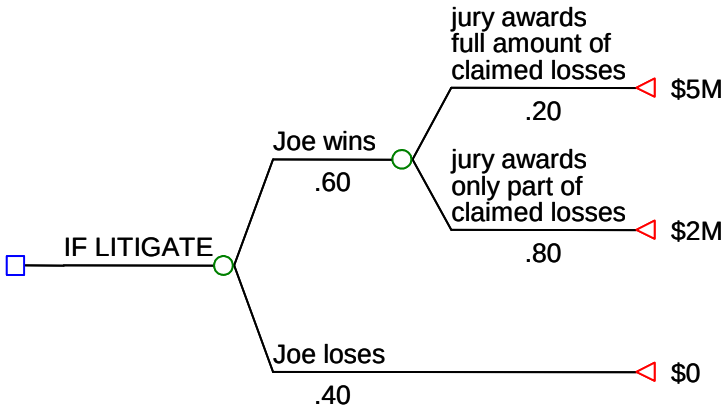


**FIGURE II-1. Joe's Simple Decision Tree**

### a. Solving a Tree Using the Compound Probability Method

There are two ways to solve a decision tree. The first method is often referred to as the "compound probability" method, and is shown in Figure II-2 below. It makes use of basic probability theory to calculate the probability of each of the litigation scenarios. Thus, for scenario 1 – which is the combination of winning the liability issue and having the jury award the full $5 million – because the first outcome (i.e., winning) was assessed at 60%[9] and the second

---

6 This average is most often referred to as the "expected value."

7 Note that your probabilities on each issue (i.e., uncertainty) must sum to 100%.

8 These are so-named because they are used to make specific decisions, such as whether to litigate or settle. They can also be used to decide whether to file a case or not, whether to pursue one trial strategy rather than another, and whether particular pre-trial investments are worth their costs or not. *See* Section II.C for examples. For short, they are frequently referred to simply as "trees."

9 Custom is to express probabilities in their decimal form under the branches of the tree. Thus, for example, 60% appears in the tree as .60 or 0.60.

outcome (i.e., full amount awarded) was assessed at 20% *conditional on the first outcome,* the "compound" probability equals 12%. Compound probabilities are calculated by multiplying together the probabilities of the outcomes that make up the particular scenario, e.g., 60% × 20% = 12% for scenario 1. Similarly, the compound probability for scenario 2 equals 48% (60% chance of winning × 80% chance of only a partial $2M[10] award). Scenario 3 consists of only one outcome – Joe loses – so its compound probability is simply the probability of that one outcome, or 40%.

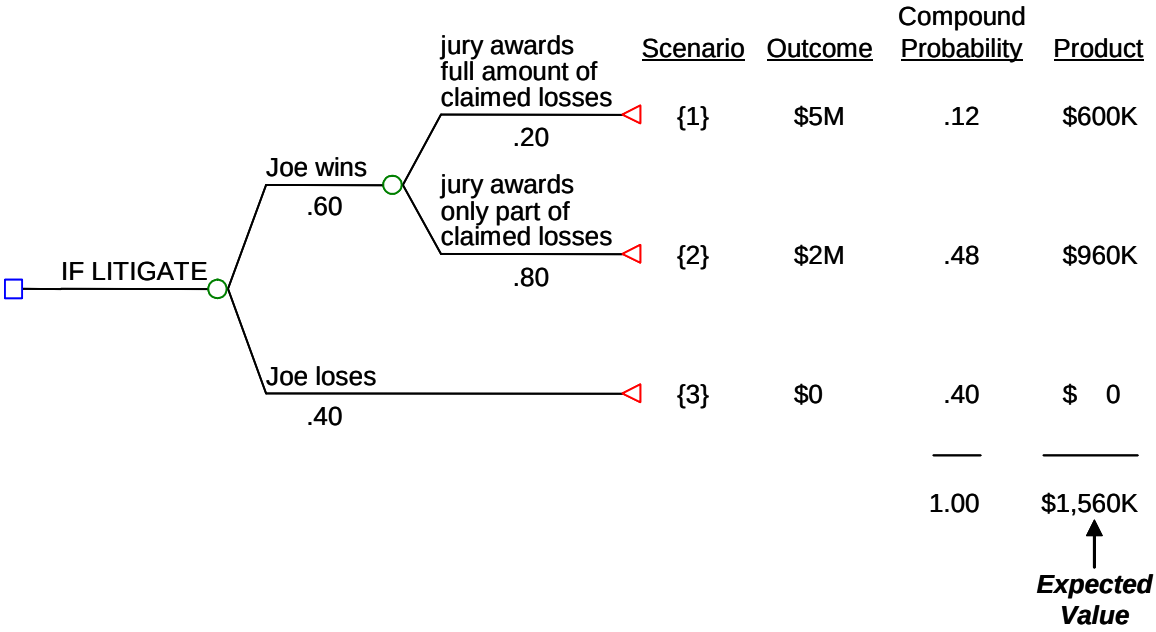


**FIGURE II-2. Calculating the Expected Value Using the Compound Probability Method**

Again, a mathematician could prove that it is theoretically correct to combine probabilities in this way, but common sense should make you even more comfortable: Should the probabilities of scenarios 1 and 2 (12% and 48%) add up to anything other than the 60% chance of winning that Sarah assessed? Should the probability of scenario 2 (48%) be anything other than four times as likely as that of scenario 1 (12%), since Sarah thought a jury was four times as likely to award only part of the claimed losses as it was to award the full amount being claimed? (Remember, conditional on winning, she assessed the chance of "part" at 80% and "full" at 20%.)

To conclude the calculation of the expected value of Joe's simple lawsuit, one would (i) "weight" (i.e., multiply) each outcome by its probability of occurring: {1} $5M × 12% = $600K, {2} $2M × 48% = $960K, {3} $0 × 40% = $0; and then (ii) sum up the products thus obtained: $600K + $960K + $0 = $1,560K or $1.56M. Later sections will address the effect of legal fees

[10] "M" will be used as the abbreviation for "million" and "K" as the abbreviation for "thousand."

and other considerations on the expected value, but for now we can think of the $1.56M as the value of Joe's case.[11]

### b. Solving a Tree Using the Roll-Back Method

A second method of solving a tree involves calculating an expected value at each "node"[12] of the tree, beginning at the *right* and "rolling-back" toward the left or beginning of the tree. See Figure II-3.

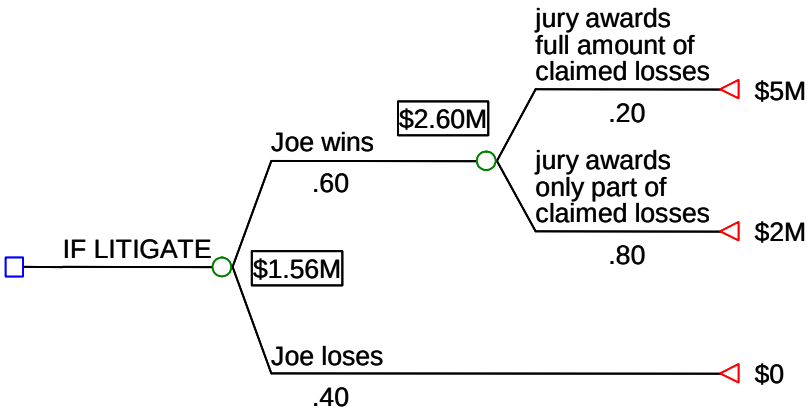


**FIGURE II-3. Calculating the Expected Value Using the Roll-Back Method**

The chance node at the right of Joe's tree describes the damages uncertainty. With a 20% chance of the full $5M award, and an 80% chance of the partial $2M award, the expected value at that node would be $2.6M. Remember, an expected value is calculated by multiplying each outcome by its probability of occurring, and then summing all the products thus obtained: $5M × 20% = $1M, and $2M × 80% = $1.6M; finally, $1M + $1.6M = $2.6M.

Moving backward to the prior chance node (i.e., the one in front of the liability issue), the expected value there would be calculated as 60% times the $2.6M weighted-average of the damages node, plus 40% times $0: $2.6M × 60% = $1.56M and $0 × 40% = $0; finally, $1.56M + $0 = $1.56M.[13]

---

[11] And doesn't this dollar amount make sense, given that most of the probability is closely split between scenarios 2 and 3 (with outcomes of $2M or $0) – suggesting a value in the area of $1 million – but where there's also a small chance of a much larger verdict (a 12% upside of $5M)?

[12] Circles are used for "chance nodes" – i.e., to represent all uncertainties such as liability issues or damages questions; squares are used for "decision nodes" – i.e., to represent the strategies being contemplated such as whether to litigate or settle. The software used by all three authors – TreeAge Pro™, formerly called DATA™ – also designates the end of each scenario with a triangle (i.e., "terminal node"), and uses a squiggly line to indicate "label nodes," which can be used to state assumptions or conclusions that are not uncertain.

[13] Of course, it is not just a coincidence that you obtain *exactly* the same expected value by both methods.

## 4. Using Decision Trees to Correctly Value More Complex Problems – *and* to Better Analyze the Legal Issues

Larry's initial discussion with his attorney, Emily, before there was any indication or thought that Joe would counterclaim, might have produced the simple tree shown in Figure II-4:[14]

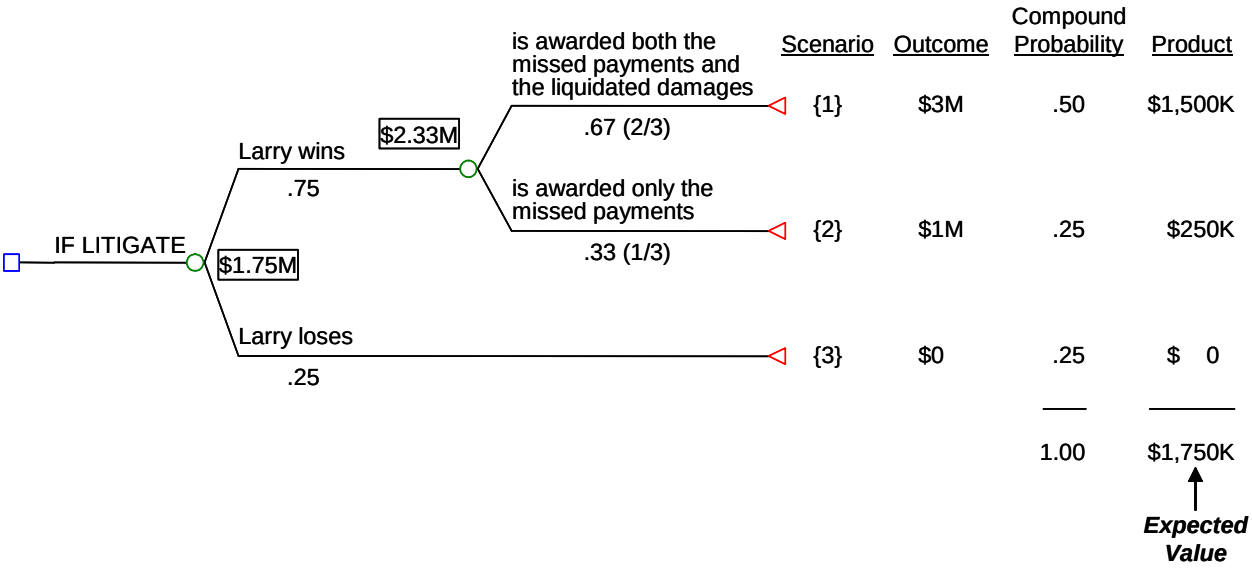


**FIGURE II-4. Larry's Simple Decision Tree – Before Joe's Counterclaim**

But now that Joe has filed his counterclaim, what is the appropriate value of Larry's case-in-chief? One of the benefits of trying to capture a lawsuit in the decision-tree format is that it forces you to think more carefully about the interrelationships and dependencies among the various issues. Surely you recognize that Larry's case-in-chief will depend on what the jury thinks about Joe's fraud and bad faith claims, but how tricky is it to get the value right by just "doing it in your head?" Instead, the decision tree can be used to help you step through the interrelationships and then calculate a more appropriate value.

The tree in Figure II-5 below reveals that Emily has advised Larry that *if* Joe convinces the jury that Larry committed fraud or breached the implied covenant of good faith and fair dealing, Larry would *definitely* lose the breach of contract claim he filed against Joe, and that Larry only has the 75% chance of winning *if* the jury disbelieves Joe's counterclaims.[15] As you can see, building in this dependency and re-doing the arithmetic reduces the value of Larry's case-in-chief from $1.75 million to just $700,000.

---

[14] Note that this tree has a higher expected value than Joe's ($1.75M versus $1.56M), even though Larry's possible verdicts are smaller than Joe's ($3M or $1M versus $5M or $2M). Can you figure out why this makes sense?

[15] One of the most important concepts for performing a good risk analysis is that the uncertainties in your decision tree must be sequenced in the order in which you expect the judge and jury to deal with them – which is not necessarily the order in which the claims are found in the pleadings.

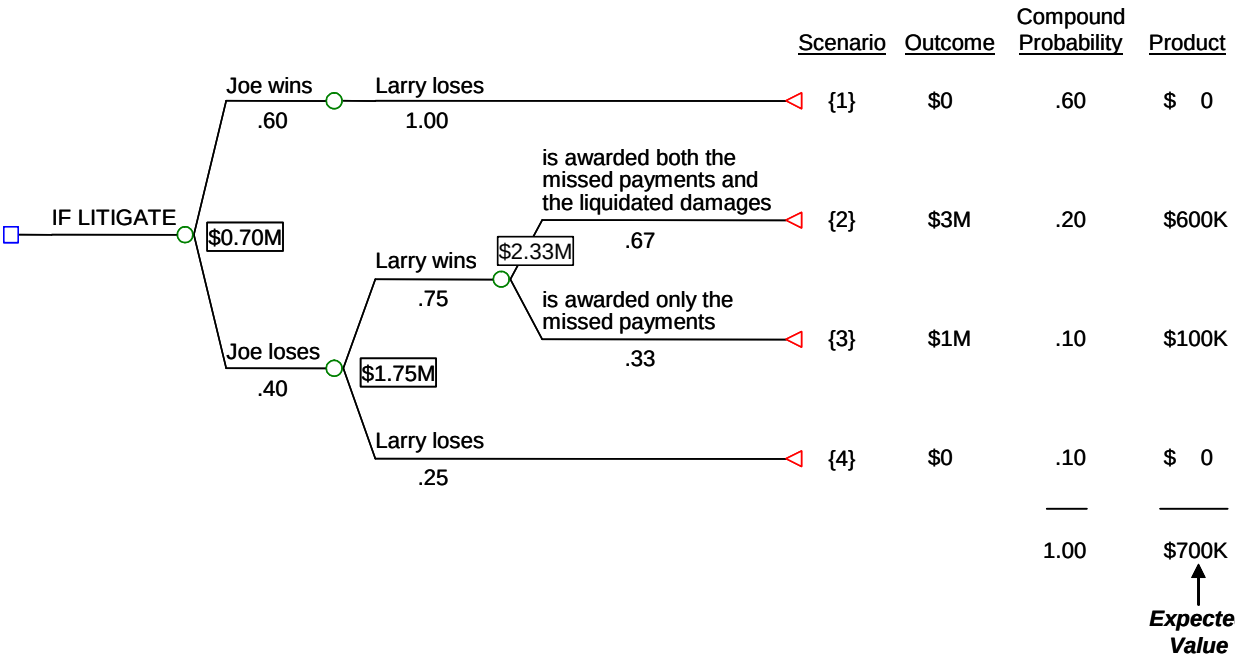


**FIGURE II-5. Larry's Simple Decision Tree – after Joe's Counterclaim**

This also means that the overall case (including Joe's counterclaim) now has a negative expected value to Larry – $0.70M minus $1.56M = negative $0.86M – and a positive expected value to Joe of the same $860,000. In other words, once we've made Larry's tree *conditional* on (or *dependent* on) the result of Joe's tree, we can simply net the two expected values to arrive at the correct overall expected value.

The tree in Figure II-5 may be better than the one in Figure II-4, but is it the best one *from a legal point of view?* For example, if Emily were able to dissuade the jury from finding that Larry committed fraud in the inducement, but not from finding that Larry breached an implied covenant of good faith and fair dealing, is there any way in which Larry might still be entitled to recover on Joe's missed payments? Would some jurisdictions permit the argument that because Joe had not previously sued to terminate the agreement, Larry should be allowed to offset any damages he might owe for breach of the implied covenant by at least some, if not all, of the payments that Joe failed to make under the not-yet-terminated franchise agreement? In other words, does the tree in Figure II-6 below represent a better analysis than the one in Figure II-5 above? Having to draw the various issues in decision-tree format – specifically, having to think about where to place and how to assess one issue (such as Larry's breach of contract claim) in relation to the different possible results on the prior issues (such as whether Joe has won or lost his claims) – will often force the attorney into a better legal analysis as well as a better quantitative analysis of case value.

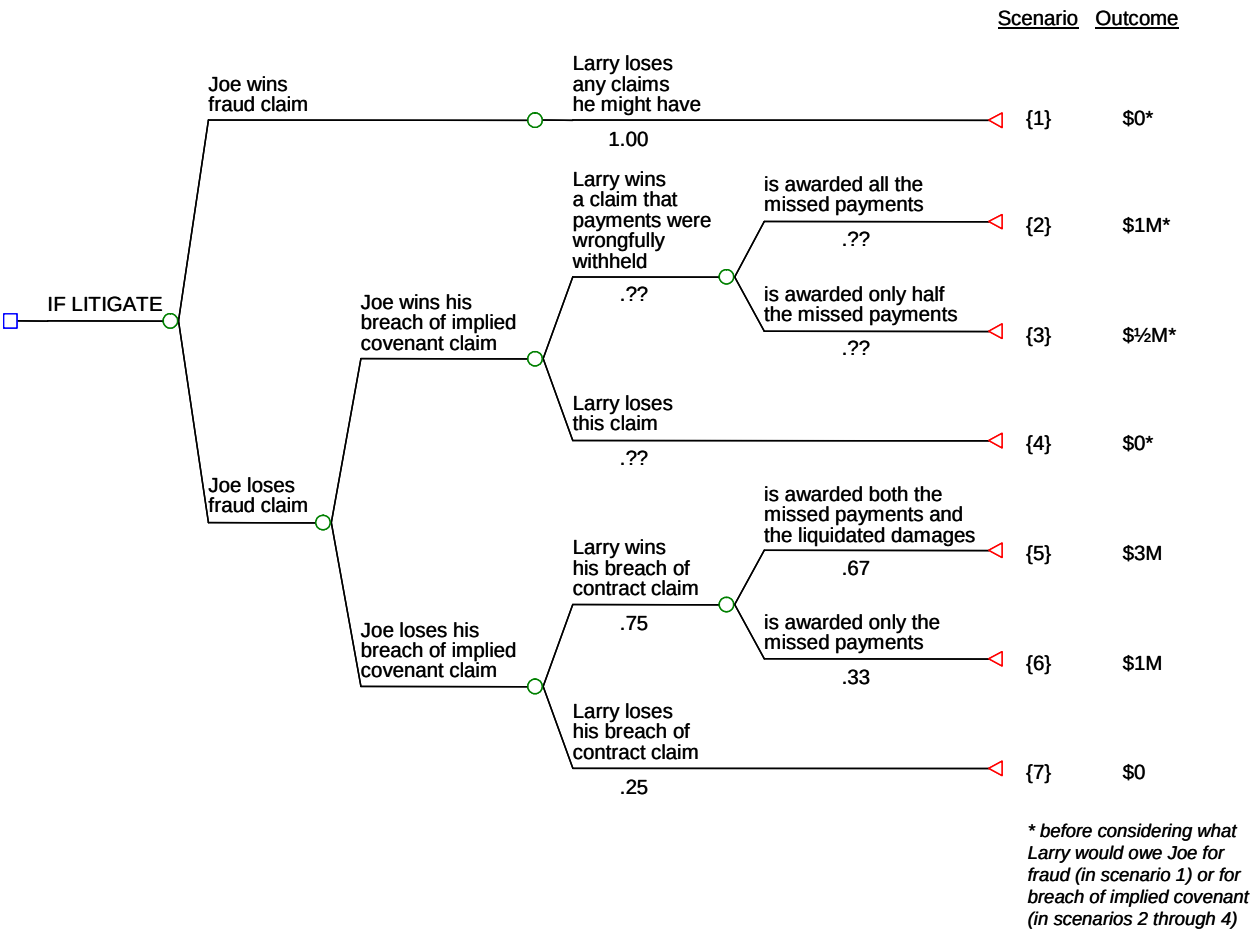


**FIGURE II-6. Alternate Decision Tree for Larry – in Light of Joe's Counterclaims**

## 5. The Role of Decision Tree Software

Although simple trees such as the ones above can be solved with nothing more than a calculator, it is foolish to think of performing a risk analysis on most cases (as will be apparent from the examples used and questions posed in Sections II.B and II.C) without the help of a software package specifically designed to generate and solve decision trees. In fact, experience has shown that it is due to the existence of easy-to-use decision tree software that more and more in-house and outside counsel are performing rigorous risk analyses. Not only are the trees generated quickly and drawn neatly (making attorneys comfortable in sharing their work product with their business clients), but the arithmetic is done correctly and instantaneously (permitting analyses of a wider set of potential pre-trial, trial, and settlement strategies).

## 6. Other Benefits from Performing a Formal Risk Analysis

Performing a formal risk analysis does more than simply improve counsel's ability to calculate the value of a case. As we will explore in the next sections, it also provides the tools to assess more realistically the chances of success or failure on each judge or jury question, and to manage litigation more cost-effectively. Furthermore, it will often improve your chances of winning at trial or exacting more favorable settlements, as explored below.

## B. The Risk Analysis Process

### 1. Capture the Key Issues and Their Interrelationships with a Dependency Diagram

So far we have looked at some simple decision trees for the dispute between Dirty Larry's and Joe Clean. But the hypothetical in Section II.A.1 suggested more issues and sub-issues. Where do these go in a decision tree? What issue should the tree start with, and where should the rest of the issues go? In real-world problems of even moderate complexity, visualizing the right tree is usually difficult. Those who know only about decision trees are often frustrated by how often they have to throw away one attempt and start over with another.

A better tool for organizing various claims and their elements, possible defenses, measures of damages, and evidentiary uncertainties is an "influence diagram" (as it is referred to by most decision tree software and academics) or "dependency diagram" (a term coined by one of the authors, since lawyers often begin their answers to questions about possible trial outcomes with the phrase "well, that *depends on* …").

With a dependency diagram, it is easy to know where to start (unlike with a decision tree). You begin with the ultimate question – "What will be the final result in the case? How much money will be owed, and to whom, after netting the results of Larry's claims and Joe's counterclaims?" – and continually dissect that into more detailed questions on which the more ultimate questions depend.[16]

As important as it is to identify all the right issues, it's as important to define the right *order* and the right *relationships* between them. As mentioned earlier,[17] the right *order* is the one in which you expect the judge and jury to address and answer the questions, which will not always be identical to the order in which an appellate court opinion or a law professor would describe things. The right *relationships* between the issues are best defined by framing the issues as "yes/no" questions wherever possible, and using labeled arrows connecting the questions to specify how the two issues are interrelated. See Figures II-7 and II-8, *infra*. In fact, having to figure out – and capture explicitly in a diagram – what happens if the answer to one question is "yes" (and then "no") is a great way to be sure you are doing the best *legal* analysis. For example, if the jury finds for Joe on his fraud in the inducement claim, then what? Is it important *also* to consider the jury's finding on his other claim, *or* is that immaterial because once the contract is rescinded and the jury awards restitution damages, Joe could not also recover lost past and future profits even if the jury were to find that Larry had also breached an implied covenant of good faith and fair dealing? Hopefully this example illustrates why many attorneys find that the exercise of trying to construct a dependency diagram actually helps them do a better legal analysis.

---

[16] Notice that long, substantive, questions will produce a better legal analysis than short, conclusory ones. For more discussion of the rules for creating good dependency diagrams, see Marc B. Victor, J. Bryan Whitworth, Clyde W. Lea, and Craig B. Glidden, *Evaluating Legal Risks and Costs with Decision Tree Analysis, in* SUCCESSFUL PARTNERING BETWEEN INHOUSE AND OUTSIDE COUNSEL § 12:17 (2000).

[17] *See supra* note 15, § II.A.4.

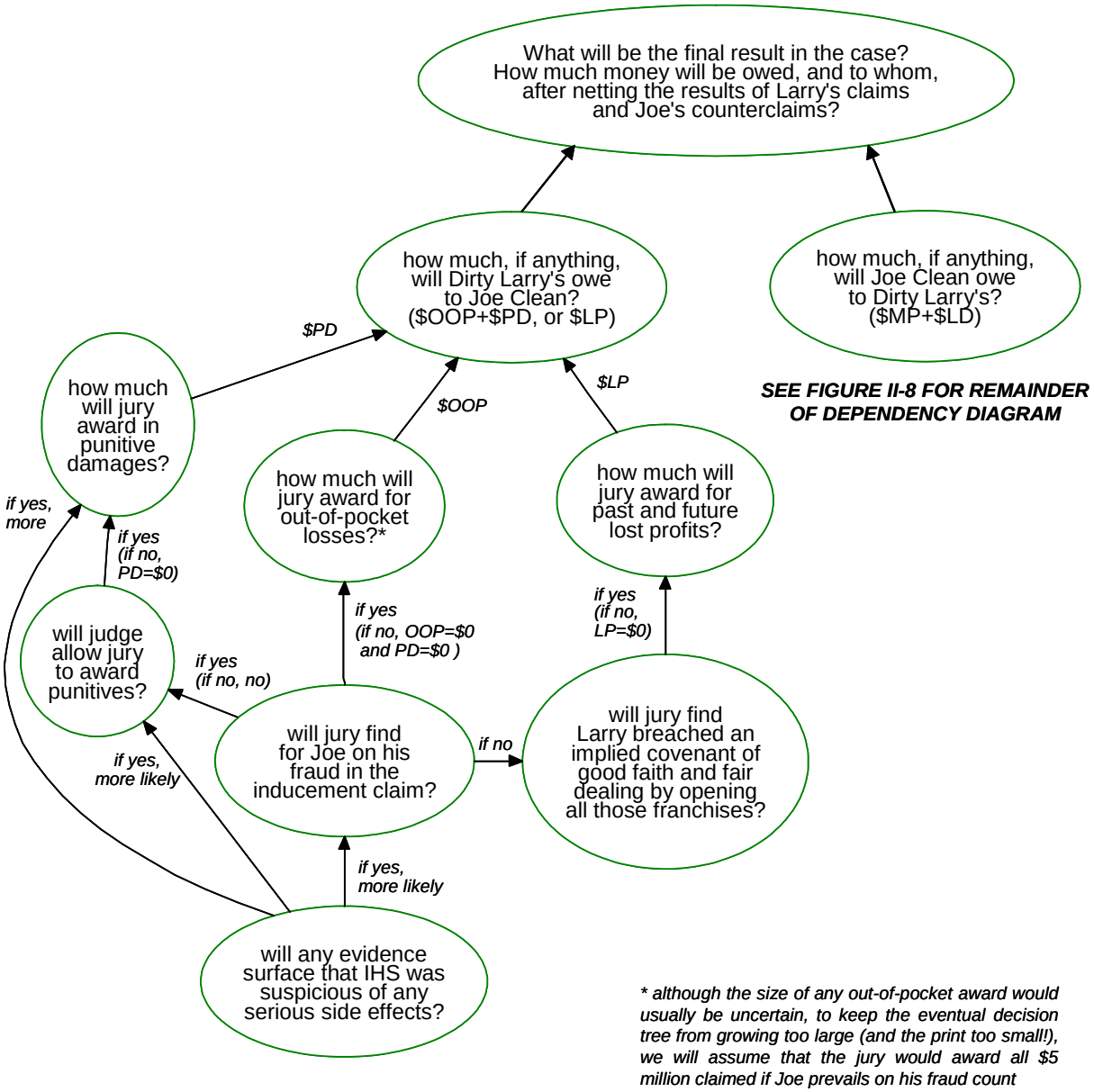


**FIGURE II-7. Dependency Diagram for Joe's Counterclaims**

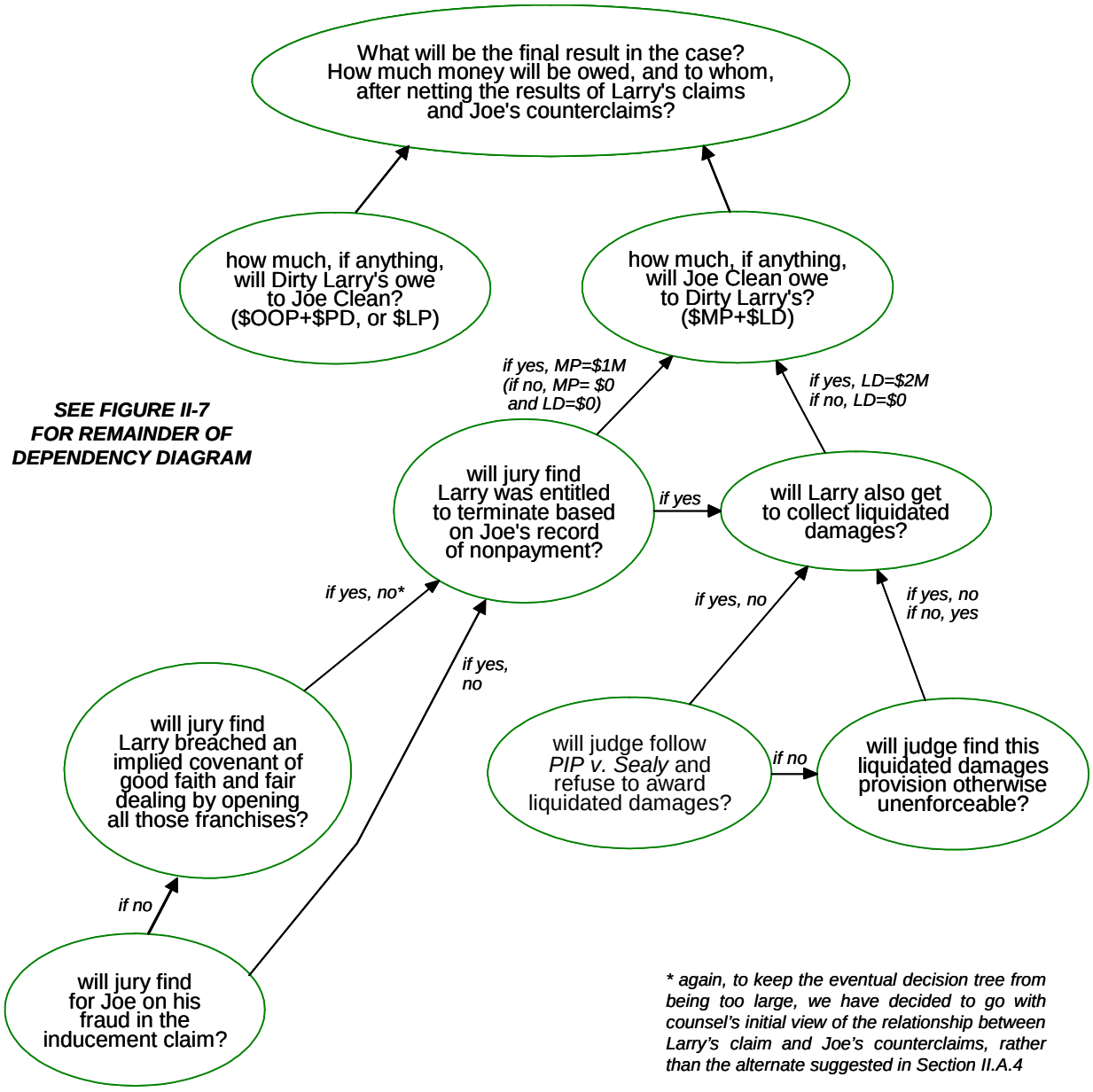


**FIGURE II-8. Dependency Diagram for Larry's Claims**

### 2. Convert the Dependency Diagram into a Decision Tree

Once you are comfortable with your dependency diagram, it is time to convert it into the corresponding decision tree – or trees.[18] The basic rule for doing so is to "follow the arrows" –

[18] It is always safest – especially for the beginner – to capture all of the issues (including all liability and damages questions and sub-questions, for all of the claims) – in one large tree. However, if your analysis would be easier to follow if it were broken up into several trees, that can be done *provided you are extremely careful not to miss any dependencies between the pieces.* For example, in separating Joe's counterclaims from Larry's case-in-chief, we saw a significant difference in the value of the latter between Figure II-4 (which did not reflect any such dependency) and Figure II-5 (which did) in § II.A.4, *supra*.

i.e., be sure that any issue at the base of an arrow goes *earlier* in the tree than whatever issue is at the *tip* of the same arrow.[19] Then, only show the opposite answers to each question on the branches emanating from each chance node,[20] and keep tacking new issues (represented by subsequent chance nodes) onto the end of the appropriate branch (or branches) as suggested by the dependency diagram arrows and how they were labeled. For example, in Figure II-9 below, the breach issue only appears after the "no fraud" branches because of how the arrow was labeled that connected the fraud and breach bubbles on the dependency diagram.[21]

---

[19] *See* Victor, *supra* note 16, at §12-18 for a more detailed discussion of this and the other conversion rules.

[20] If you find it helpful to repeat the questions, <u>never</u> put them on branches. Instead, they should be placed as "column headings" – see Figures II-9 and II-10, *infra,* for illustrations.

[21] Remember that this arrow was labeled as it was because of the legal analysis outlined in the last paragraph of § II.B.1, *supra*. Had the legal analysis been different, the label would have been different, and so would the correct tree.

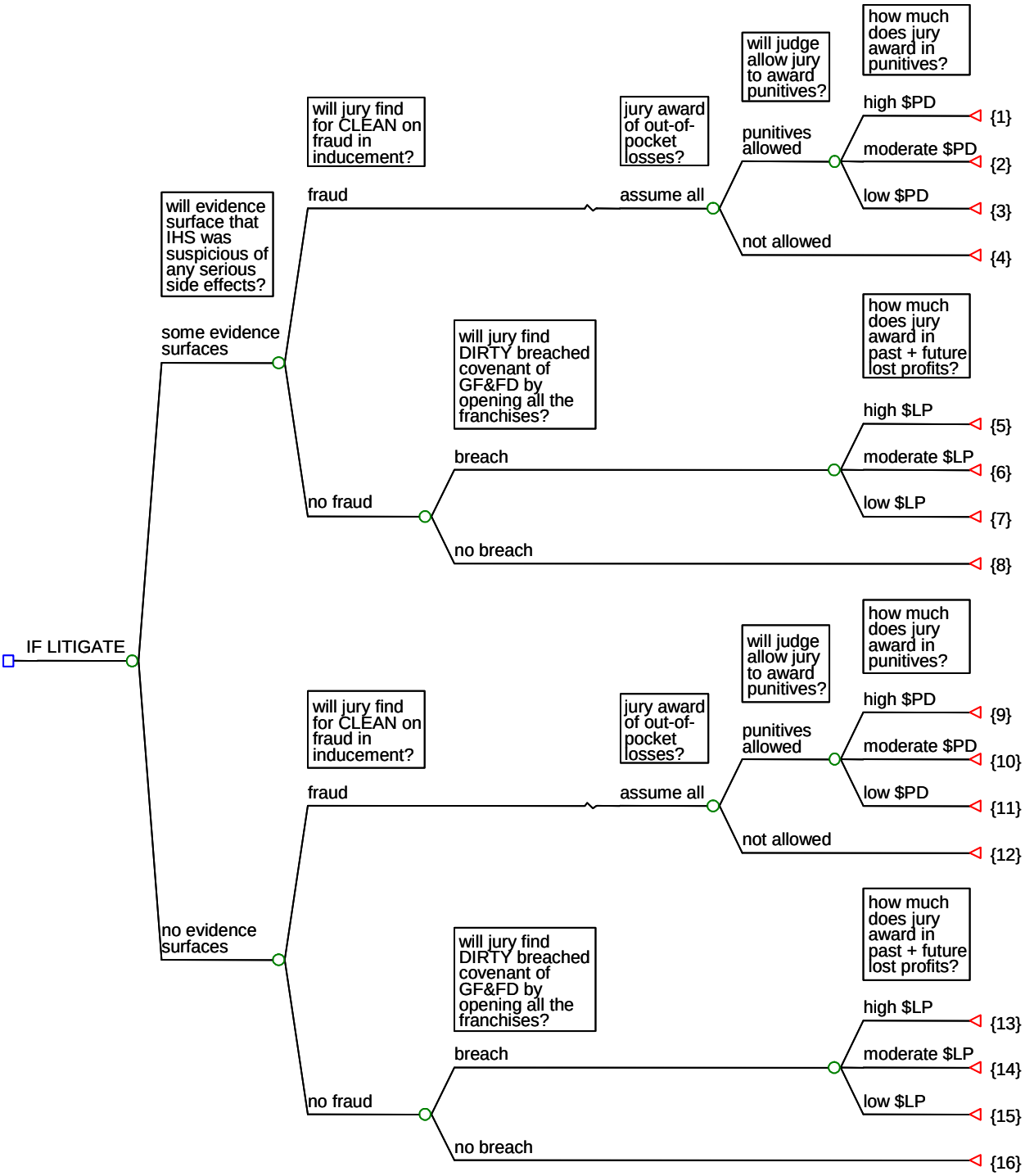


**FIGURE II-9. Decision Tree for Joe Clean**

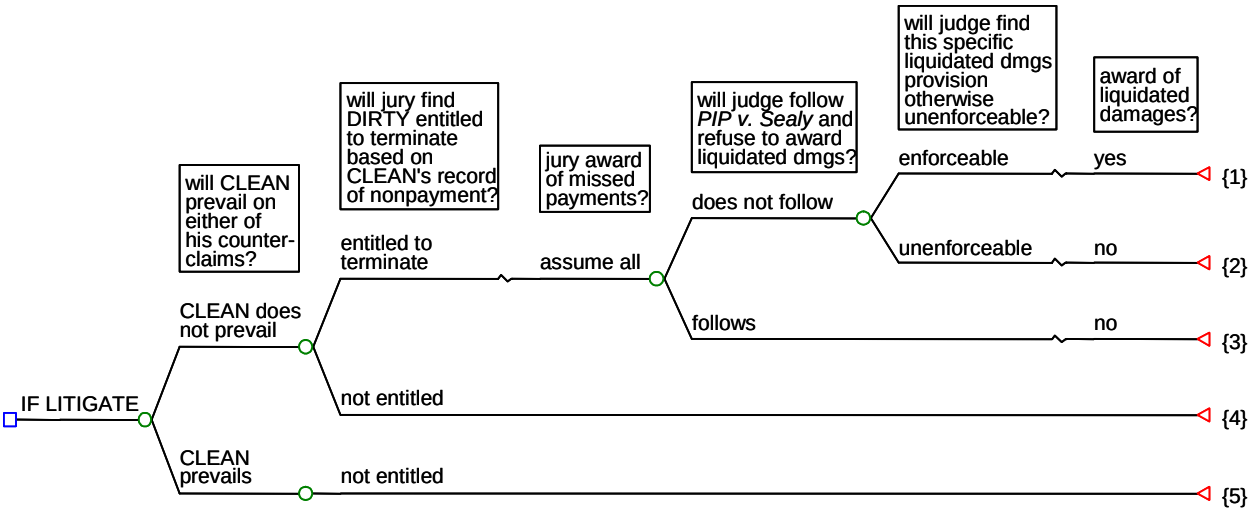


**FIGURE II-10. Decision Tree for Dirty Larry's**

### 3. Assess Realistic Probabilities and Verdict Ranges

Many attorneys with only a casual understanding of decision tree analysis would now feel it was time to start writing probabilities under the branches. To do so, however, without *first* taking the time to articulate carefully all of the reasons why the judge or jury could reach each result on each issue would be a serious mistake – most surely resulting in unrealistic assessments, and thus an unrealistic appraisal of case value. Furthermore, if clients start pressing for numbers before these "lists of reasons" have been developed, counsel will usually feel it's too difficult to quantify what a judge or jury might do.

But once the lists have been generated, typically through group discussion (even if it is only a group of two), lawyers find that (i) it's not so hard to put a number to their opinion, and (ii) they're more comfortable that their assessment is neither optimistic nor pessimistic. For example, before consulting the table on the following page, what do you think the chances are that the jury will find that Dirty Larry's breached an implied covenant of good faith and fair dealing?

Now review the following list of the evidence and arguments each side is likely to put before the jury (and of some of the things the jury might think up on its own), and then try to assess the probability of the jury finding breach / no breach. Which assessment is easier to make – the one without the benefit of the lists, or the one with? Which do you think is more realistic (especially if you take care to articulate your opponent's points the way he or she is likely to – i.e., if you don't "sugar-coat" the other side's arguments or evidence)? Developing these lists explicitly is crucial, but too often skipped over.

| **Will jury find Larry breached implied covenant of good faith and fair dealing by opening all those franchises?** | |
|---|---|
| Reasons Jury **Does** Find Breach | Reasons Jury Does **NOT** Find Breach |
| • thinks Larry was outrageously greedy<br>• thinks he was far more interested in his own personal profit than the health or survival of any one of his franchisees<br>• as a result, he killed the goose that laid the golden eggs<br>• no single franchisee would have ever anticipated having to compete with so many other franchisees *on the same bloc*k<br>• especially given the sizeable investment Joe had to make to get into the business<br>• Larry does not make a good witness – comes off as arrogant, someone who can do no wrong<br>• judge's explanation of an "implied covenant of good faith and fair dealing" will sound pro-plaintiff<br>• might think this is a compromise: less severe than saying Larry defrauded Joe, but Joe didn't end up with the business he expected at the outset | • nothing in the agreement said Larry couldn't open as many locations as he wanted<br>• if Larry can show that other franchisees with similar competition continued to profit after Joe began to struggle<br>• Larry will testify that it was having an outlet on every street corner that made the system successful for everyone<br>• if it weren't possible to make a profit with so much competition, there would not have been the continued demand for additional franchises in locations already served by several<br>• the real problem was that Joe was a bad manager to begin with, and then paid little attention to the franchise after coming into his inheritance<br>• to get to this part of the tree, the jury didn't believe Larry committed fraud, so must not have hated Larry |

One other tool that has proven valuable in producing more realistic assessments is a "probability wheel" to visualize percentages. Figure II-11 shows two screen shots of the probability wheel from the TreeAge software. Do you see a difference between the chances portrayed by the wheel on the left and the one on the right? Most lawyers clearly do, whereas most lawyers would otherwise have a very hard time saying whether there was closer to a 60% chance of something happening or closer to a 70% chance. Although the numbers 60% and 70% are nearly indistinguishable for many lawyers (and for many non-lawyers), their visual equivalents are not. Thus using the wheel encourages sharper thinking.

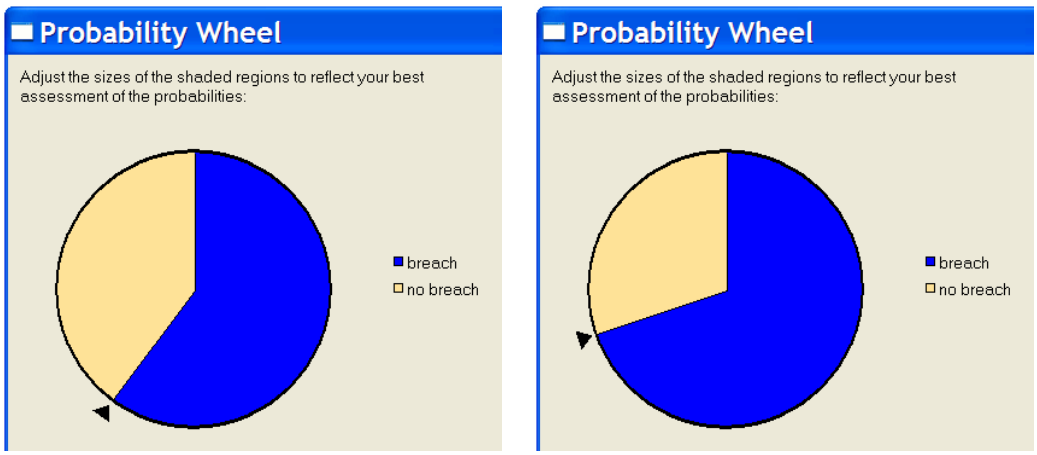


**FIGURE II-11. Visualizing Uncertainty Using a Probability Wheel**

In case it isn't obvious, the worst way to express your opinion is by *only* using phrases such as "good shot," "definite possibility," "certainly could," and so forth.[22] You've seen how to value a case using probability arithmetic to solve for the expected value. But if you had two ways of winning a case and one was described as a "good shot" and the other a "definite possibility," and if you won, you "might" win only $1 million but you "certainly could" win $2 million, how would you combine these verbal assessments to figure out the value of your case?[23]

Assessing potential jury awards could also be done with the probability wheel, whenever you feel that the jury will simply pick between one of two (or a few) specific amounts. For example, if there were some evidence from which the jury could conclude that Larry had waived Joe's first missed payment – but the evidence was far from persuasive – you would have a chance node where the top branch represented an award of $1 million for all four missed payments, and the bottom branch represented an award of $750,000 for only three missed payments (assuming each payment should have been $250,000). After developing a list of reasons explaining why the jury might end up on each branch, you would adjust the wheel to reflect your view of the relative likelihood of each result.

Frequently, however, juries (or judges) can award any amount – from a relatively low sum to a relatively high one. Whenever you feel that there is some "most likely" award, but as the trier moves further and further away from that amount – in either direction – the likelihood of such an increasingly extreme award becomes increasingly unlikely, there is a simple three-value approximation to use:

First, do your list of reasons for an extremely high award in one column and an extremely low award in the other. Don't focus on specific dollar amounts yet – just focus on why the jury would come in with an unusually high or an unusually low amount.

---

[22] If you are comfortable with such phrases, you should definitely use them as you *start* to form your opinion. But you must eventually convert your feeling into a number between 0% and 100%.

[23] *See also* Marc B. Victor, *Risk Evaluation in Intellectual Property*, *in* INTELLECTUAL PROPERTY COUNSELING AND LITIGATION § 50.03 (1988); and Marc B. Victor, *Litigation Risk Analysis™ and ADR*, *in* DONOVAN LEISURE NEWTON & IRVINE ADR PRACTICE BOOK § 17.2(iii) (1990).

Next, imagine 100 different juries had all gotten to this damage question and written down their awards on a piece of paper. If you were to arrange their awards from low to high, what would be the tenth highest award? In other words, don't try to envision the *absolutely* highest award – it has too small a probability to be included in the analysis. But decide what would be the 90th percentile of the range of awards given by these 100 juries. Now, what would be the tenth lowest award – i.e., what would be the 10th percentile of the range of awards given by these 100 juries? Lastly, assess the median of the range – i.e., the 50th percentile.[24] Note that you should leave the median assessment for last.

Finally, use these values on the branches of a three-branch chance node, as was done for both punitive damages and lost profits in Joe's tree in Figure II-9, and use probabilities of .25 under the high branch, .50 under the median branch, and .25 under the low branch.[25]

#### 4. Calculate the Expected Value of Litigating

The hard work – coming up with the right legal analysis (to produce a good dependency diagram and decision tree), and thinking about each side's evidence and arguments (to get to realistic probability assessments) – is done. Now for the easy part – some simple arithmetic – but some very powerful insights.

Applying the concepts described in Section II.A.3 above, the solution to Joe's tree and Larry's tree can be seen in Figures II-12 and II-13 respectively.

[24] Another way of thinking about these three values is to say simply (i) "there is a 90% chance the award will be below what amount?" (ii) "there is a 10% chance it will be below what amount?" and (iii) "there is a 50% chance it will be above or below what amount?"

[25] This approximation is widely used because the 90th percentile is usually close to the mean of the top 25% of the full range, the 50th percentile is usually close to the mean of the middle 50% of the full range, and the 10th percentile is usually close to the mean of the bottom 25% of the full range. In other words, by using these specific points and probabilities you will come close to preserving the "expected value" of the entire range.

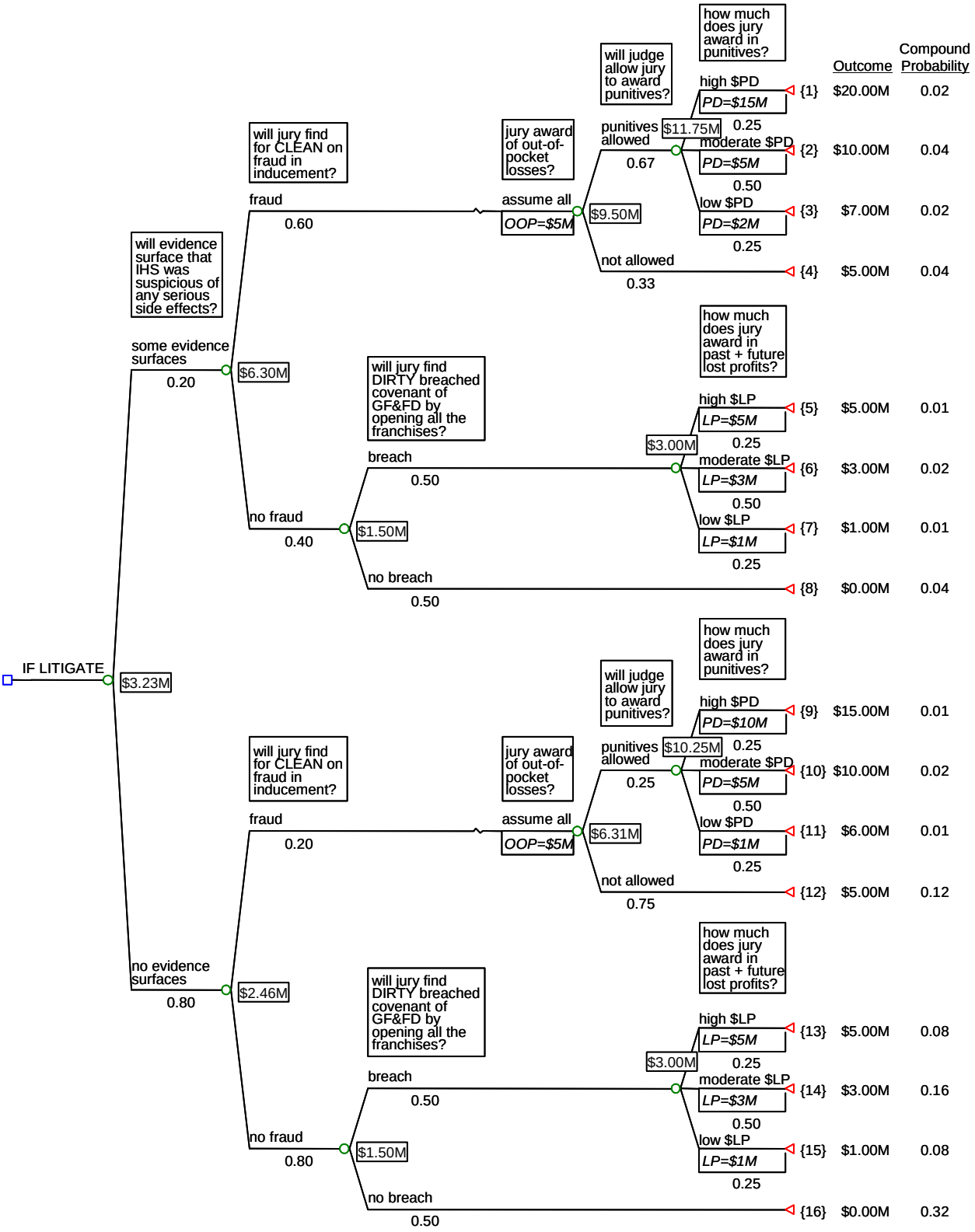


**FIGURE II-12. Solved Decision Tree for Joe Clean**

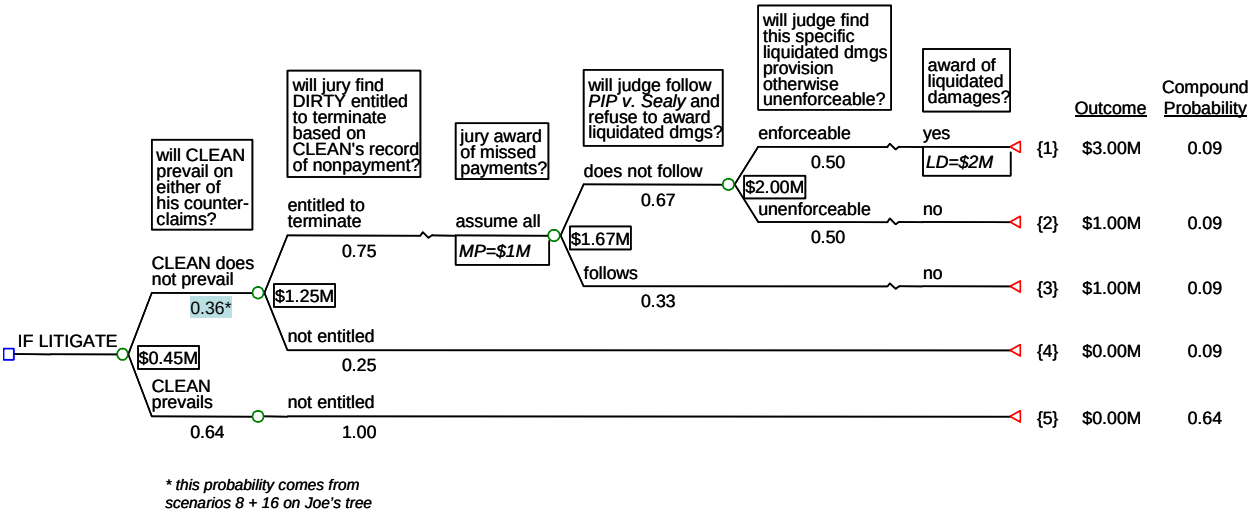


**FIGURE II-13. Solved Decision Tree for Dirty Larry's**

Thus, the net overall expected value is a *negative* $2.78M for Larry and a *positive* $2.78M for Joe, after subtracting Joe's expected value of $3.23M from Larry's of $0.45M (or vice versa).[26]

## C. Using Risk Analysis to Make Better Decisions

### 1. Settle versus Litigate Decisions

The most frequent use of a decision tree analysis is for purposes of deciding at what dollar amount to settle. As discussed in Section II.A.3, it is consistent with the concept of profit maximization (or loss minimization) for the plaintiff to settle for the expected value or more and for the defendant to settle for the expected value or less. When it's not possible for a party to "beat the expected value," the party should reject the settlement offer or demand and proceed with litigation.

However, there are two major adjustments to the expected value to consider in almost every case, and a third set of concerns that will arise in many.

#### a. The Impact of Litigation Costs

Whenever it will cost money to carry out a strategy, economists would say it is appropriate to deduct those costs, if plaintiff, from – or add those costs, if defendant, to – the expected value of the strategy. Let's hypothesize that it will cost each side $500,000 in attorney and expert fees to take this case to verdict.[27] That would mean that Joe's expected value *net of*

[26] The analyses have so far assumed that Sarah and Emily (the parties' attorneys) have ended up with the same decision trees and assessed the same probabilities and verdict ranges on all the issues. Frequently this will not be the case, but it doesn't mean that the parties still can't reach a settlement. *See infra* § II.C.1.

[27] If management, and possibly operations, will be disrupted as a result of the litigation, that cost can also be added to the costs of lawyers and experts, to come up with a *total* litigation cost.

*costs* is a positive $2.28M (i.e., $2.78M minus $0.50M) and Larry's expected value *net of costs* is a negative $3.28M (i.e., $2.78M plus $0.50M).

Notice what happens once costs are included in the analysis of case value:[28] The range of dollar amounts that would be acceptable settlements to either side widens. This is one reason why cases settle even when the parties don't have exactly the same trees, probabilities, and expected values. For example, perhaps Larry evaluated Joe's chances on his counterclaims differently, resulting in an overall expected value (before costs) of only negative $2M (not $2.78M). Even if Joe isn't persuaded by Larry and thinks the overall expected value is $2.78M, there is still a range where settling is the best strategy for both sides: between $2.28M and $2.5M. For example, at $2.4M, Joe is better off to settle than litigate, because his litigation expected value net of costs is estimated at $2.28M (i.e., $2.78M - $0.50M); *and* Larry is also better off to settle than litigate, because his litigation expected value net of costs is estimated at negative $2.5M (i.e., $2.0M + $0.50M).

### b. The Effect of Risk Aversion

If you owned the right to flip a fair coin and win $100 on heads, but $0 on tails, would you sell your right to another for only $35? Most people with almost any accumulated wealth would not: $35 is too little for something with an expected value of $50. But if you owned the right to flip a fair coin and win $10 *million* on heads, but $0 on tails, would you sell your right to another for "only" $3.5 million? Most people would, because as the stakes grow large in relation to their wealth, they become increasingly risk averse and prefer the "sure" payoff to the risky venture.

This concept is equally true when confronted with the possibility of losses and the chance to pay a sure amount to get out of the risk – that's why people buy insurance policies. It also explains why the payment is known as a "premium" – insurance companies can charge *more* than the expected value of the loss because buyers are risk averse.

Businesses, too, are usually risk averse when the amounts involved are significant, as they often are in litigation. The easiest way to appreciate the risk in a lawsuit is to display all the decision tree's outcomes and compound probabilities in the form of a "bar chart," such as the one for Joe and Larry shown in Figure II-14:[29]

---

[28] Only those costs not yet incurred (i.e., your future costs) should be included. Those already incurred (often called "sunk costs") should be ignored, as they cannot change the relative attractiveness of settling versus litigating.

[29] To generate such a chart for Joe and Larry, we actually need to build one large decision tree that combines the two trees shown in Figures II-12 and II-13. This is done by eliminating the first chance node from Larry's tree (the one that summarized the result of Joes' counterclaims) and tacking the remaining chance nodes (i.e., those covering termination, *PIP v. Sealy*, and enforceability) and dollar awards (from $3M in scenario 1 to $0 in scenario 4) onto the end of scenarios 8 and 16 of Joe's tree. When the tree is completed and solved, the expected value would, of course, remain $2.78M.

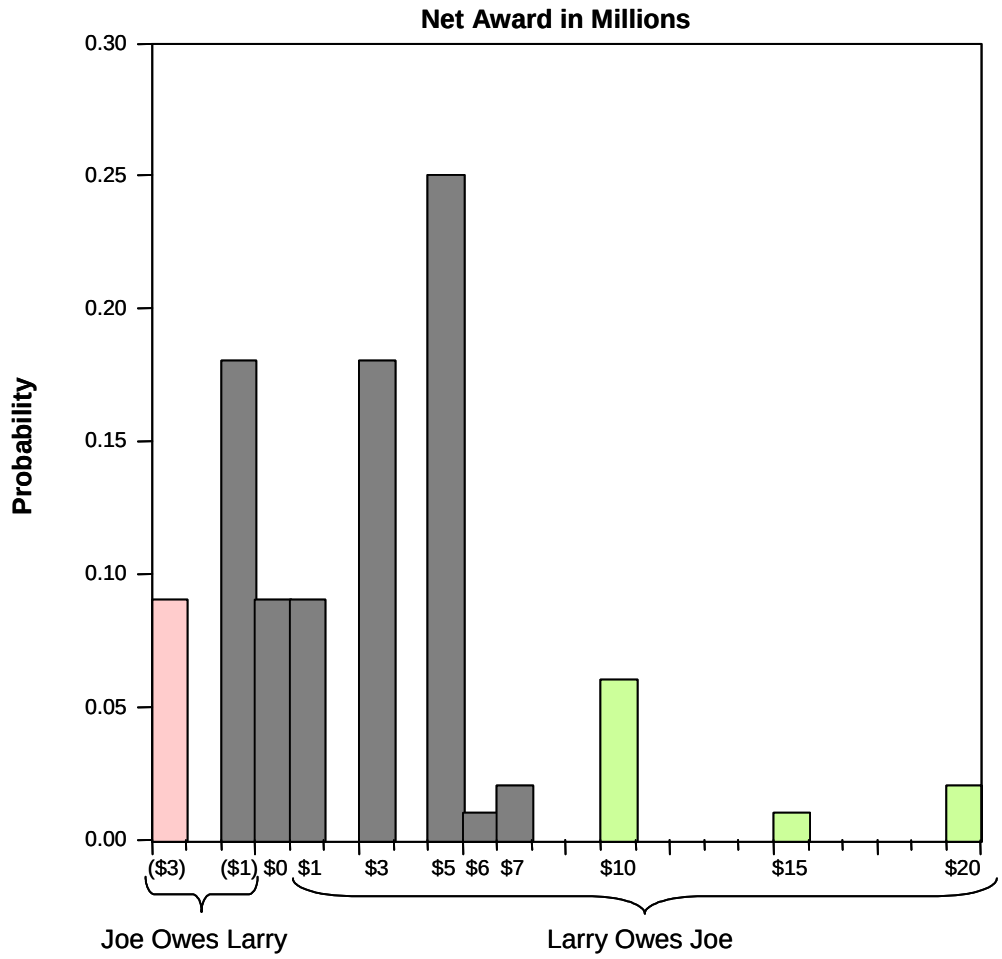


**FIGURE II-14. Bar Chart for All Claims Combined**

Joe *might* be willing to take a little less in settlement to protect against the almost 10% chance he'd owe Larry $3 million (depending on how big the inheritance was, and how much losing $3 million would hurt). And Larry *might* be willing to pay a little more to settle to protect against the nearly 10% chance he'd get hit for between $10 and $20 million (depending on the net worth of Dirty Larry's).

Risk aversion is another reason why cases settle, even when the plaintiff's expected value is greater than the defendant's as a result of differing assumptions about the issues, probabilities, and verdict ranges: risk aversion causes the plaintiff to value the case *below* the expected value, and causes the defendant to value it *above*.

### c. The Consequential Effects of a Lawsuit

The decision to take a case to verdict rather than settle, or to file suit in the first place, often cannot be made without considering the *possibility* and *financial impact* of such "consequential effects" as negative publicity, harming important business relationships, and the filing of additional suits. In some instances, it may be enough simply to ask "Do these other concerns turn what would otherwise be a good settlement into a bad one (or vice versa)?" In

answering this, as with everything we have done so far, one must remember to consider not only the *severity* of the potential impact but also its *likelihood* of occurring.

In other instances, it may be necessary to add these concerns *explicitly* to your risk analysis. For example, many defendants on the eve of trial (i.e., with few costs remaining) facing the simple case shown in Figure II-15, would reject plaintiff's $6M settlement demand, since the expected value of litigating is only $4.4M.

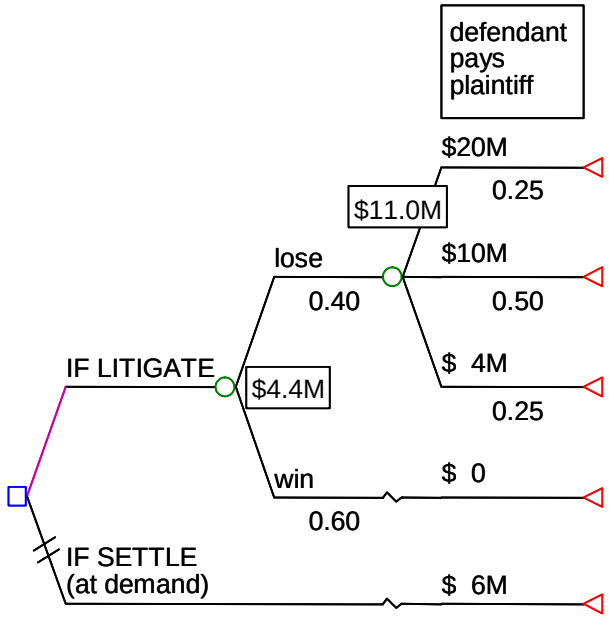


**FIGURE II-15. Simple Tree for Defendant before Considering Publicity**

But what if the client is very concerned about the potential publicity impact of a big adverse verdict – or simply of going to trial where bad evidence may surface and key executives may be asked some embarrassing questions – and doesn't think there is likely to be much good publicity generated by a settlement or even by a win? As you look at the revised tree in Figure II-16 below, note that even though we have hypothesized big probabilities of very costly bad publicity,[30] the expected value of litigating is still slightly less than that of settling at the plaintiff's current demand. (By studying the tree carefully, can you make "intuitive sense" out of this quantitative conclusion?)

[30] The tree uses a number of single-branch label nodes to show the expected value of the additional publicity. In reality, the business people may have done a detailed risk analysis of their own to evaluate this potential cost.

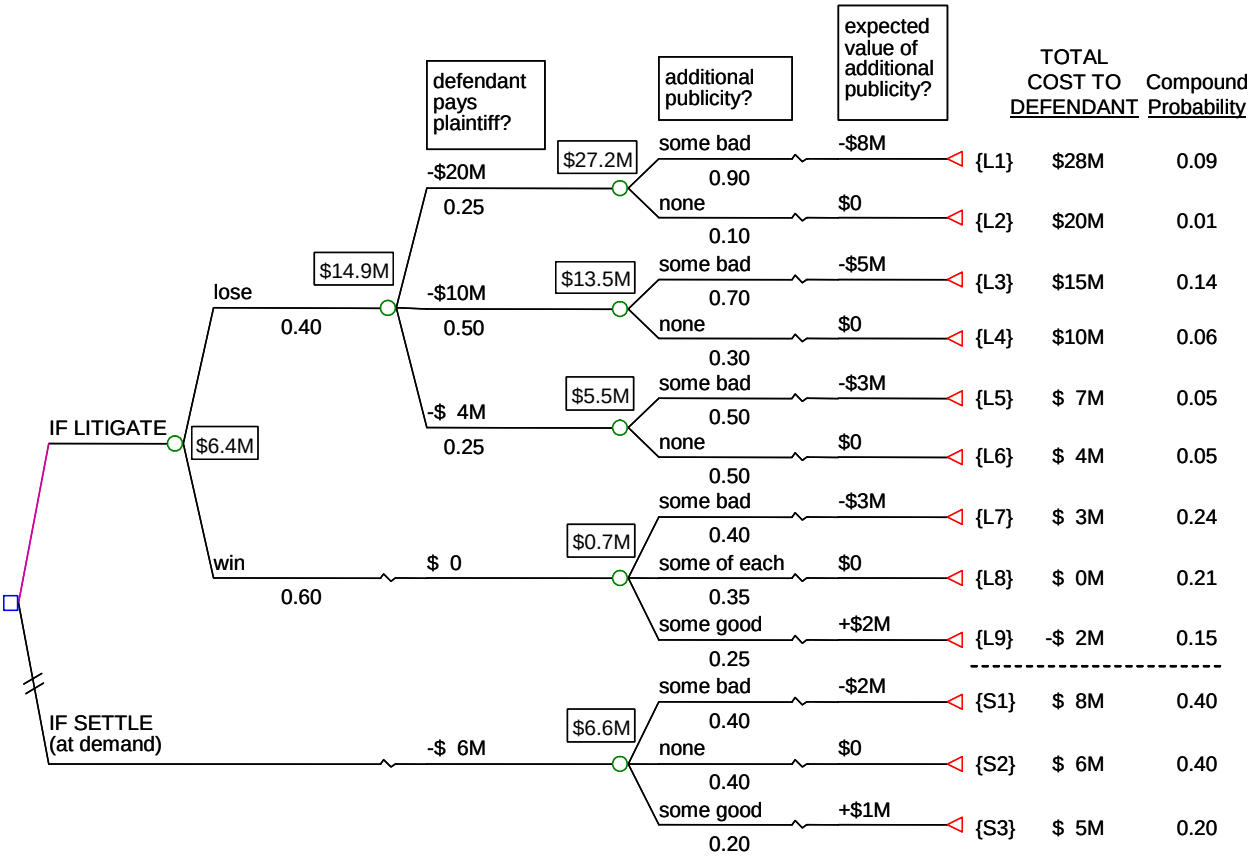


**FIGURE II-16. Simple Tree for Defendant after Considering Publicity**

Because it is so easy to over- or under-react to this or any of the other potential consequential effects of litigation, modeling them explicitly in a decision tree will often be the way to proceed.

And even though the numbers hypothesized in the above example were not quite bad enough to make plaintiff's settlement demand acceptable, the existence of consequential effects – just as was the case for litigation costs and risk aversion – will often allow parties to settle even when they disagree about the expected value of their underlying dispute.

### 2. Resource Allocation Decisions

Although the most frequent use of a decision tree analysis by novices is to guide settlement strategy, more advanced users have found them invaluable in making intelligent, cost-effective, decisions about overall case budgeting and specific pre-trial activities.

#### a. Overall Case Budget

It is somewhat easier to think about an appropriate overall budget when your expected value is positive (as is the case for Joe, or any typical plaintiff). First you must realize that Sarah's various probability assessments on Joe's behalf assumed *some* level of funding (both for her firm and for damage experts) to prepare and present Joe's claims of fraud and bad faith, and to try to defeat Larry's breach of contract case against Joe. Assume she roughly figured it

would take $400,000 to put on a good affirmative case and $100,000 to put on a good defense. Is it worth spending this kind of money?

We can see from the earlier tree in Figure II-13 – by looking at the $1.25M roll-back value to the right of the branch "CLEAN does not prevail" – that Joe would be looking at losing a probability-weighted average of $1.25 million if he didn't bring his counterclaims and simply faced Larry's breach of contract suit. So it's easy to say that it is worth spending $400,000 to prepare and argue Joe's counterclaims, since doing so moves Joe from a negative $1.25M expected value to a positive $2.78M expected value, which is an improvement of over $4 million! (Whether Joe can improve on his expected value by budgeting even more than $500,000 in total will be explored in the next section.)

It is somewhat harder to think about an appropriate budget for a defendant (or any party whose expected value is negative), but the concept of probability-weighted averages will help. Larry is facing an expected value of negative $2.78M, based on some level of funding – say $500,000 – that Emily assumed when making her various probability assessments of being able to defeat Joe's claims of fraud and bad faith (or at least minimize their damages) and win Larry's own breach of contract case against Joe. Without getting as detailed as we will in the next section, Larry could roughly calculate that if spending $100,000 less on counsel and experts adversely impacted the case value by even 5%, it would not be a good business move, since 5% × $2.78M = $139,000.

### b. Issue-by-Issue Spending Levels

Should Joe pour another $250,000 into his claim that Larry breached an implied covenant of good faith and fair dealing, which if proven could result in an award between $1 and $5 million? Should Larry be willing to spend an extra $25,000 on legal research and briefing to try to convince the judge not to follow the California precedent of *PIP v. Sealy?* Or is it more important for Larry to spend any extra money on trying to convince the judge not to submit punitive damages to the jury in the event Joe proves fraud in the inducement?

These and similar questions, which have frustrated business clients and their attorneys for so long, are actually easy to answer once counsel has captured his or her thoughts in a decision tree analysis – and especially if decision tree software is being used. To answer the first question posed above, Sarah could simply replace her current 50% probability of breach of the implied covenant with, say, 60%. Re-solving the combined tree (i.e., the one that integrates both Joe's tree and Larry's, as discussed in footnote 29)[31] would show that the overall expected value of $2.78M jumps to $3.09M – an increase of over $300,000. This information should make it much easier for Joe and Sarah to think about whether it's worth spending more money on this part of the case.

In addition to making a specific change to any of the probabilities (or verdict amounts) and re-solving the tree(s), such as was just illustrated, it's also easy for software to generate "sensitivity analysis graphs" on any given issue. Figure II-17 shows one for the implied covenant issue we just looked at:

[31] Because a higher probability of winning this breach claim not only improves Joe's expected value on Figure II-12 but also changes the first probability on Figure II-13, it's best to use the combined tree.

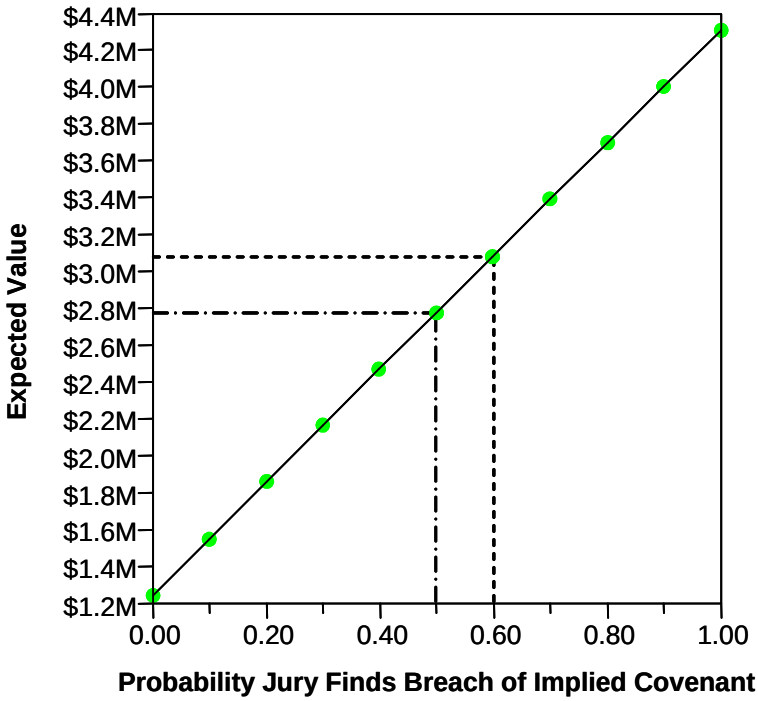


**FIGURE II-17. Sensitivity Analysis Graph for Breach of Implied Covenant Issue**

The dot in the lower left corner of the graph indicates that even if Joe has zero chance of winning this argument, the overall expected value of the case is still a positive $1.25M. Similarly, the dot in the upper right corner indicates that the value would rise to $4.3M if this claim were a sure winner. The dashed lines correspond to the analysis discussed in the earlier paragraph: at Sarah's initial assessment of 50%, the expected value was just under $2.8M; if that probability could be increased to 60%, the expected value would rise to almost $3.1M. In fact, *every* 10 percentage point change in the probability of winning this issue changes the expected value by about $300,000.

Figure II-18 shows a sensitivity analysis graph for Larry's *PIP v. Sealy* issue.

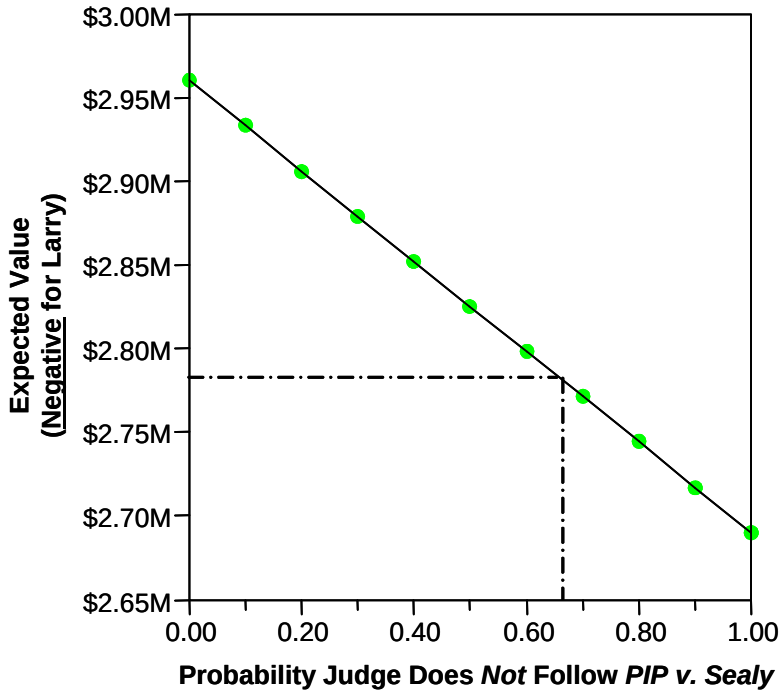


**FIGURE II-18. Sensitivity Analysis Graph for *PIP v. Sealy* Issue**

What can we learn from this graph? Larry wants the judge not to follow the California precedent. As shown by the dotted lines, at Emily's initial assessment of a two-thirds chance of being able to win this legal argument, Larry's expected value was negative $2.78M. If the judge was 100% sure to side with Emily and Larry, the expected value would be just under negative $2.70M. At the other extreme, if there were 0% chance of the judge not following this precedent – i.e., if the judge were sure to follow it and thus disallow Larry's claim for liquidated damages as a matter of law – Larry's expected value would rise to a little more than negative $2.95M. In other words, from one extreme to the other, the expected value changes by approximately $250,000 (i.e., $2.95M minus $2.70M), or by approximately $25,000 for every 10 percentage point change. Thus, to answer the question posed at the outset of this section, Larry should be willing to spend an extra $25,000 on legal research and briefing, so long as the impact on his probability of prevailing increases by at least 10 percentage points (i.e., from 67% to 77% or better). When confronted with such quantitative conclusions, it's usually easy for counsel to react – e.g., "the odds should easily improve by at least that" or "I can't imagine ever being that confident on this kind of issue."

Figure II-19 shows the sensitivity analysis graph that was generated to help address the last question posed at the start of this section – namely, "Is it more important for Larry to spend any extra money on trying to convince the judge not to submit punitive damages to the jury in the event Joe proves fraud in the inducement?"

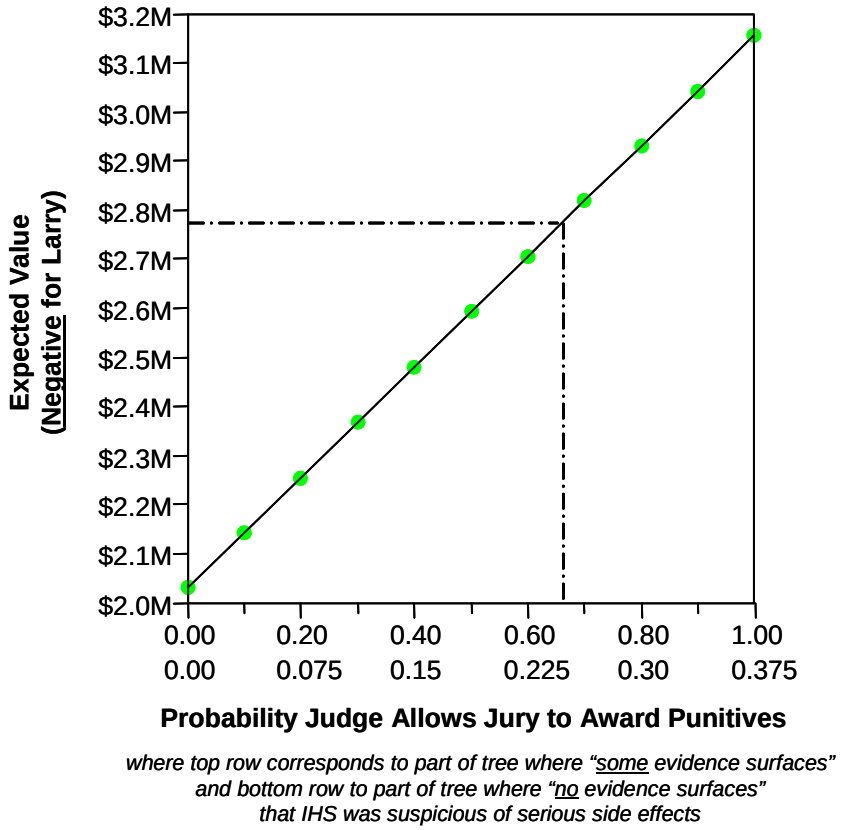


**FIGURE II-19. Sensitivity Analysis Graph for Punitive Damages Judge Issue**

To understand the horizontal axis of this graph, it is necessary to refer back to the decision tree in Figure II-12 and see that different probabilities were assessed on this issue depending on whether or not some evidence surfaces that IHS was suspicious of any serious side effects. Counsel gave a probability of 67% (i.e., two-out-of-three) if such evidence is introduced, but only 25% if no such evidence is introduced. To perform the above sensitivity analysis, this proportion (67:25) was maintained across the range. The results show that each 10 percentage point change in the part of the tree where "some evidence surfaces" (and 3.75 percentage point change in the part of the tree where "no evidence surfaces") would change the value of the case by more than $100,000.[32] Thus, if Emily could have a similar impact on the probability of prevailing on this issue as on the *PIP v. Sealy* issue (e.g., an improvement of 10 percentage points on either), and Larry's money was limited, it would be better spent on this punitive damages issue.

Using decision tree software, there is one other type of sensitivity analysis graph that is easy to generate, one that compares multiple issues on a single chart known as a "tornado diagram."

[32] Visually approximating such conclusions will usually be sufficient for most purposes. One could also calculate a change of approximately $1.1 million (i.e., the difference between $2.05M and $3.15M) as the probability on the top line ranges from 0% to 100%, and then divide this by 10 to arrive at the change for every 10 percentage points.

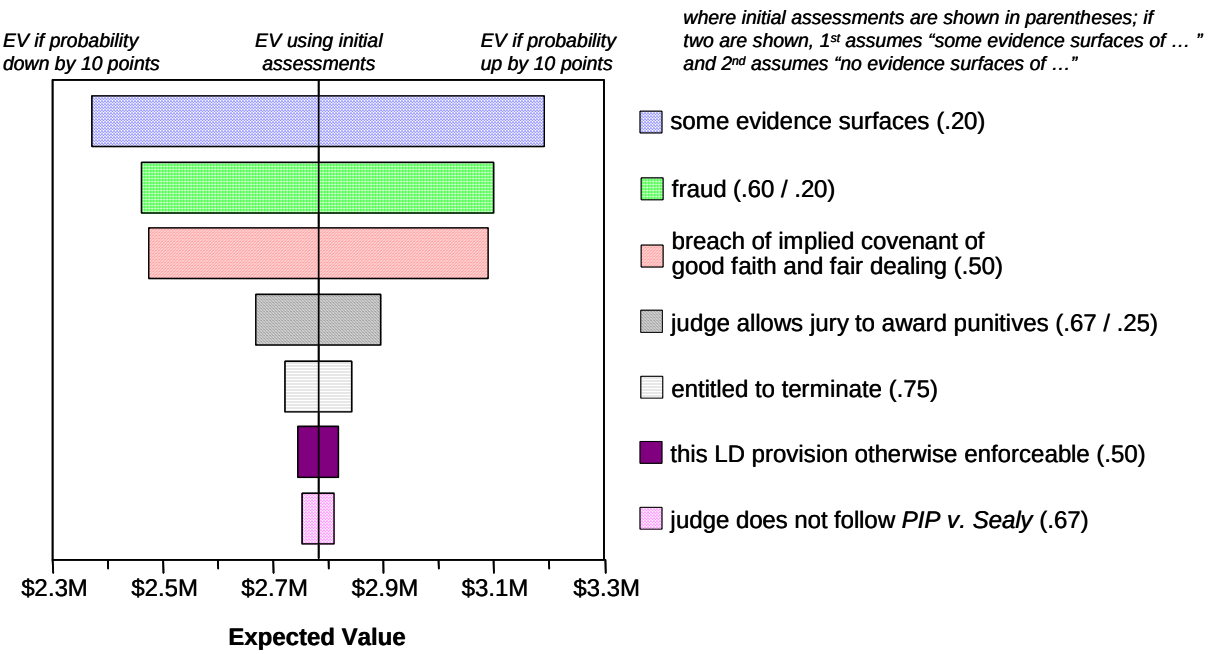


**FIGURE II-20. Tornado Diagram for Multiple Issues**

As you can see from the labels above the bars, it is usually best to explore the impact of a 10 percentage point decrease and increase on each issue. The bars towards the top represent those issues for which the 20 point combined swing (minus 10 points to plus 10 points) have the biggest impact (and thus where the client would get the "biggest bang for the buck"); the bars towards the bottom, those for which the 20 point change have the smallest impact (and where the client would get the "least bang for the buck"). For example, if the probability of surfacing some evidence that IHS was suspicious of serious side effects could be changed from 20% to 10%, the expected value would fall from $2.78M to approximately $2.35M; if it could be increased to 30%, the expected value would rise to approximately $3.2M, for a total swing over the 20 point range of approximately $850,000, or $425,000 per every 10 percentage points. In general, then, more resources should be allocated to the issues towards the top. The exception would be if counsel feels there is little chance of being able to change the odds on one of those issues, but a high probability of being able to change the odds on one of the issues with somewhat less bang for the buck.[33]

[33] In other words, it is – once again – the *expected value* that matters (in this case, the expected value of the additional expenditure). For example, if a 10 percentage point improvement in the probability of winning Issue A would improve your case value by $400,000, and a similar improvement in the probability of winning Issue B would improve your case value by only $200,000, but you thought that an equal expenditure of $20,000 on either issue only had a 25% chance of helping on Issue A (by the 10 percentage points), but a 65% chance of helping on Issue B (again, by the 10 percentage points), then although both expenditures are worthwhile (A: 25% × $400K gain = $100K "expected value of the gain," for a cost of $20K; B: 65% × $200K gain = $130K "expected value of the gain," also for a cost of $20K), the latter is the better investment if only one can be undertaken.

### 3. Communication Decisions

Although it has not been explicitly said, we are sure the reader appreciates how useful the decision tree is for communicating between attorneys and business clients. Not only does the tree use the language of probabilities and financial consequences relied on daily by senior executives, but the lists of reasons developed on each of the issues[34] have proven a tremendously effective way of educating clients about the arguments and evidence (especially of the opponent) that judges and especially juries may seize on. And if you have computerized your analysis, it's easy to update the tree and the various results as the case develops, and so keep your client well informed. Finally, the risk analysis – in particular, the bar chart[35] – is also helpful for the attorney, because it makes clear to the client that probabilities are not guarantees.[36]

## D. Timing and Cost of Performing a Risk Analysis

Plaintiffs should do a preliminary risk analysis before filing the complaint, to be sure the suit is cost-effective and that the pleading is as coherent and strong as possible. Defendants should tackle at least the dependency diagram before filing the answer. Many will also do a rough quantitative analysis to determine whether immediate steps should be taken to settle the matter.

Then, as the case progresses, new uncertainties may arise and old ones may look significantly different based on the results of interviews, formal discovery, legal research, damage studies, etc. Thus, you should expect to update your analysis from time to time.

The two most time-consuming steps in performing a full risk analysis are the development of the dependency diagram and the lists of reasons.[37] These can take anywhere from a couple of hours in simple cases to several days in very complex ones with significant financial exposure. But good counsel should be engaging in the thought, discussions, and analysis necessary to generate these *whether or not they are ever going to perform a formal risk analysis*. Thus, the *incremental* time for completing such an analysis – i.e., for (i) converting the dependency diagram into a decision tree, (ii) weighing the points on the lists of reasons and expressing one's views in numerical percentages rather than vague expressions such as "good shot," and (iii) calculating the expected value – will often be just one or two hours.

# III. BUDGETS, FORECASTS AND RISK ANALYSIS

## A. The Role of Forecasting in Risk Analysis

A reliable risk analysis must capture all potential downside risk. Downside risk includes an accurate estimate of potential litigation costs. The likelihood and amount of litigation expenses, after all, affects the expected value of a case just as directly as any potential

---

[34] *See supra* § II.B.3.

[35] *See supra* Figure II-14.

[36] For many of the same reasons that a risk analysis is a great communication vehicle between counsel and client, it can also be extremely valuable when sitting down with a mediator or directly with your opponent in settlement talks. See Victor, *Litigation Risk Analysis™ and ADR*, *supra* note 23.

[37] *See supra* § II.B.1 and § II.B.3, respectively.

recovery or exposure, particularly in cases with potentially large costs. Including litigation costs in a risk analysis is particularly useful in two situations:

- First, litigation costs are important when attorneys' fees are recoverable by the prevailing party. In the ordinary case where both sides bear their own fees, litigation costs are arguably neutral, at least for thinking about a fair settlement.[38] That is, the cost of further proceedings is similar for both parties, such that neither party arguably should discount its settlement position unless the other side makes an equivalent concession in its position. Where fees will be shifted, however, both the upside and downside risk should be included.

- Second, litigation costs are arguably more important to consider for a plaintiff than for a defendant. A defendant, after all, has little choice but to defend a case and incur the associated costs (although a defendant may have some leeway about how best to spend those dollars[39]). A plaintiff, however, has the option of whether or not to sue, and it ordinarily makes sense for a plaintiff from the outset to determine how much of its potential recovery will be eaten up by litigation costs. A plaintiff's enthusiasm for pursuing a potential million dollar recovery, for example, might be tempered significantly if the cost of getting there is $500,000.

For most lawyers, the tool for estimating litigation costs is a budget. Mere mention of the word "budget," however, causes many outside counsel to shudder reflexively, and litigators in particular are notoriously loathe to prepare them. The reasons are as understandable as they are numerous:

- Some clients treat budgets as de facto fee caps, and either deeply discount or refuse to pay amounts beyond an approved budget;

- Some clients consider budget preparation to be an administrative task, akin to preparing bills, and refuse to pay for it;

- Some outside counsel intentionally understate the total cost of litigating a case, since most cases settle long before the total potential costs (most of which are back-loaded in connection with trial) are incurred, and an estimate that includes all potential costs (including those that likely will never be incurred) gives an unrealistically inflated picture of what actual litigation costs will be;

- Others overestimate the total cost, believing that it is better to give an inflated estimate than commit the cardinal sin of going over budget;

- The inherent uncertainty of litigation makes budgeting difficult; and

- Many lawyers are uncomfortable with the budgeting process or believe that they lack the required "number" skills.

---

38 *See supra* § II.C.1.a.

39 *See supra* § II.C.2.b.

Many of these concerns are driven by the typical use of a budget as an implied or actual cap on fees – that is, essentially a promise by outside counsel that it will litigate the case to conclusion within the budgeted amount. For risk analysis, however, budgeting serves a very different purpose. In risk analysis, anticipated fees and costs are just another of the many uncertain variables that must be accounted for in estimating the net expected value, and like most components will change as the case develops. So long as both the lawyer and client understand this uncertainty at the outset, ongoing variations from an initial estimate can be seen not as "errors" by outside counsel but as a necessary consequence of imperfect information.

When used in connection with risk analysis, therefore, a better term than "budget" may be "forecast." Unlike a budget, a forecast does not carry with it any implied promise that the case will be litigated within the forecasted amount, or impose consequences if the forecast is exceeded. At the same time, as with all other components of a risk analysis, the reliability of the overall risk analysis depends on the lawyer's ability to handicap both the amount and the likelihood of litigation expenses as realistically as possible, given the limited information available at any given time.

That said, preparing a forecast as part of a risk analysis has significant benefits for the budgeting process (and many clients may wish to use the same analysis for both purposes). First and foremost, it leads to more intelligent strategic thinking. Litigation budgets typically use lump dollar estimates for each phase of litigation (e.g., pleading, discovery, motions, pre-trial, trial, and appeal), and are based overwhelmingly on the anecdotal experience of the individual lawyers preparing the budget. That is, most budgets are based on little more than a lawyer's impression of how much "this type" of case "typically" costs.

As anyone who has read *Moneyball*[40] knows, that kind of anecdotal, experience-based guesswork is rife with danger. Except for the most routine, cookie-cutter litigation, virtually every case is different – and the differences between cases can have significant cost implications. Routine decisions, such as whether to bring a motion, videotape a deposition, retain an expert, or prepare demonstrative trial exhibits, all can add up to significant expenditures over the course of a case.

Preparing a budget as part of a risk analysis imposes rationality on these decisions. Risk analysis helps identify which strategies get the most "bang for the buck" – i.e., those that have the greatest potential influence on the litigation outcome.[41] It therefore assists counsel in determining what motions are worth bringing, or discovery worth taking. It helps counsel eliminate wasteful, unproductive activity while focusing on activity that serves the client's ultimate objectives.

The second benefit of risk analysis for the budgeting process is that it leads to more accurate and reliable budgets. The biggest problem with the traditional "lump sum" budget is that the budget isn't busted until the lump sum is exceeded. That is, if the budget provides for, say, $100,000 for discovery, the case is "within budget" until the 100,001$^{st}$ dollar is spent – even

---

[40] Michael M. Lewis, MONEYBALL: THE ART OF WINNING AN UNFAIR GAME (2003). *Moneyball* examined how the Oakland Athletics baseball team was able to compete successfully against better-heeled competition despite limited financial resources. Among other things, the Athletics' general manager became convinced that baseball scouts were overwhelmingly influenced – and misled – by their own personal, anecdotal experiences, and attempted instead to implement a scouting process based on objective analysis of statistical data.

[41] *See supra* § II.C.2.b.

if that happens with discovery only half complete. If a budget incorporates specific assumptions, however, revising the budget becomes much easier: when an unanticipated event occurs *(*e.g., a party files an unanticipated motion, or takes an unexpected deposition, or a successful motion eliminates the need for forecasted discovery, or any other material assumption is eliminated), it's time to revise the budget.

Third, preparing budgets in tandem with a risk analysis makes it possible to refine the risk analysis to estimate costs – and settlement values – at various stages within a case. Ideally, a budget estimates the sequence and timing of each category of expenses. If a risk analysis indicates that the ideal strategy is for a party to conduct certain discovery and file a certain motion, a sophisticated budget will be able to estimate the specific costs necessary to get to that point. So, for example, if a risk analysis shows that resolution of a particular issue will have the greatest effect on expected value, a sophisticated forecast will enable counsel to estimate the costs of obtaining the necessary discovery and seeking resolution of that issue, preferably as a priority before other expenses are unnecessarily incurred.

Fourth, risk analysis requires that the associated budget identify *all* costs – not just attorneys' fees. Non-attorneys' fee costs (such as court reporter and videographer charges, expert and consultant fees, document copying, imaging, and indexing costs, and the like) can easily constitute twenty to thirty percent of the total cost of a case. Many outside counsel, however, routinely omit those costs entirely and instead include only attorneys' fees. Preparing the budget as part of a risk analysis forces both outside counsel and the client to realistically estimate those costs (and, as appropriate, to discuss how to manage them) from the outset.

While the amount of work involved may at first seem daunting, much of it is already required for other purposes. Federal Rule of Civil Procedure 26(a)(1), for example, already requires the parties to identify (at least in general terms) potential witnesses and documents as part of their respective initial disclosures. Many other courts require (by local rule or otherwise) that the parties submit proposed scheduling orders, including dates for discovery and motion cutoffs, expert disclosures, pre-trial statements, and trial. In practice, those disclosure obligations are all too often given little more than lip service. Doing so does not eliminate the time and expense of assembling that information; it simply postpones it to a later day, usually in the discovery process. If the parties are going to assemble the information eventually, anyway, it makes strategic sense for a party to do so sooner rather than later so that it can formulate its strategy accordingly. Risk analysis provides the framework to do so.

### B. The Mechanics of Forecasting

There are as many approaches to budgeting and forecasting as there are creative lawyers and clients. The approach described below captures the basic components necessary for realistic litigation forecasting.

As with risk analysis, technology simplifies forecasting tremendously. Unlike risk analysis, however, forecasting does not require specialized or particularly sophisticated software. The spreadsheets shown below, for example, use rudimentary functions of Microsoft Excel®. The spreadsheets have three overriding objectives: (i) to express the budget in terms of hours rather than dollars, which counsel are generally more comfortable estimating on a task-by-task basis and which are easier to track on an ongoing basis, (ii) to include all costs in addition to attorneys' fees, and (iii) to let the spreadsheet perform the resulting arithmetic cost calculations automatically, allowing counsel and the client to concentrate on strategic considerations.

### 1. Step I: Staffing

The first step is to identify the specific lawyers and other persons who will bill time to the matter. Not only does identifying the specific staffing at the outset give the client certainty as to who will work on the case – a common concern among clients – but it provides the hourly fee data that, when combined with the hour estimates in the forecast, will generate the total costs.

Figure III-1[42] shows a typical proposed staffing and rate structure. The forecast assumes that five timekeepers will bill time on the matter: two partners, two associates, and a paralegal. One partner, Sarah Triallawyer, will primarily handle the case and will bill 90% of the partner time at $255 per hour; her "rainmaker" partner, John Q. Solicitor, will bill only 10% in a supervisory role at $300 per hour. The blended (i.e., average) partner rate (which the spreadsheet will apply to all "partner" time estimates) is therefore $255 per hour. Junior associate Mary Motionwriter will handle 75% of the associate chores at an hourly rate of $125, with Hank Hardball expected to help out 25% of the time at $150 per hour; the blended associate rate is therefore $131 per hour. Donald Drudgerylover will handle all the paralegal tasks at $90/hour.

**Proposed Staffing**

| | |
|---|---|
| Matter Name | *Dirty Larry's v. Joe Clean* |
| Matter Number | *123456* |

| | Rate | % of Time |
|---|---|---|
| Partners: | | |
| **Sarah Triallawyer** | **$250** | **90%** |
| **John Q. Solicitor** | **$300** | **10%** |
| Blended partner rate | *$255* | |
| | | |
| Associates: | | |
| **Mary Motionwriter** | **$125** | **75%** |
| **Hank Hardball** | **$150** | **25%** |
| Blended associate rate | *$131* | |
| | | |
| Paralegals and Other Timekeepers: | | |
| **Donald Drudgerylover** | **$90** | **100%** |
| Blended "other" rate | *$90* | |

| | |
|---|---|
| Revision Number: | *1* |
| As of: | *10/01/14* |

**FIGURE III-1. Sample Staffing and Rates Proposal**

### 2. Step 2: Spell Out the Assumptions

The next step is to spell out, in as much detail as reasonably possible and in narrative form, counsel's best estimate (using the limited information then available) as to how the case is likely to proceed. In the following step, these assumptions will be translated into specific hour

[42] In the spreadsheet examples used in this section, bolded courier type indicates data entered by counsel; regular arial type indicates descriptions on the form; and italicized arial type indicates data calculated by Excel or copied by Excel from other fields within other parts of the spreadsheet. In Figure III-1, for example, the matter name, matter number, revision number, and date are copied from a different spreadsheet page completed by counsel.

and cost forecasts. Each assumption should therefore include sufficient detail on which to base the corresponding hour and cost estimates. Document discovery assumptions, for example, should include items such as the number of sets of requests anticipated, the total number of pages expected to be produced, whether the documents will be imaged or kept in hard copy, and the associated cost, etc. Likewise, anticipated depositions should include the anticipated deponents, location, preparation and deposition length assumptions, and associated cost. Figure III-2 shows a sample set of assumptions.

| **Assumptions** | |
|---|---|
| Matter Name | *Dirty Larry's v. Joe Clean* |
| Matter Number | *123456* |
| Timing – Estimated Milestones | |
| Filing of initial pleading | **11/1/2014** |
| Case at issue | **1/31/2015** |
| Completion of discovery | **2/28/2016** |
| Trial date and duration | **7/1/16, two weeks** |
| Pleadings Stage | |
| Anticipated pleadings | **Complaint, answer/counterclaim, answer to counterclaim** |
| Anticipated pleading motions | **Motion to strike Larry's claim for liquidated damages based on PIP v. Sealy** |
| Anticipated provisional remedies | **Motion by Joe to enjoin termination pending trial** |
| Fact Discovery | |
| Document assumptions | **2 sets of requests from each side plus 3 third-party subpoenas; 10,000 pages of production; each page imaged @ $0.35/each; two motions to compel** |
| Interrogatory/RFA assumptions | **1 set of interrogatories and 1 set of RFA's from each side** |
| Offensive deposition assumptions | **Joe (16 hours prep, 8 hours depo, $1000 court reporter, $1000 video); 2 neighboring franchisees (ea. 4 hours prep, 4 hours depo, $500 reporter, no video)** |
| Defensive deposition assumptions | **Larry (8 hours prep, 8 hours depo, $1000 court reporter, $1000 video); IHS rep (2 hours prep, 4 hours depo, $500 court reporter, no video)** |
| Experts | |
| Anticipated testifying experts | **Damages ($75,000 total fees); medical ($25,000); franchising ($25,000).** |
| Other anticipated consulting experts | **Jury consultant ($50,000)** |
| Offensive expert deposition assumptions | **3 experts, all remote locations, all video; each 24 hours prep, 8 hours depo, $1000 court reporter, $1000 video, $450/hour expert fees, $400 air travel, 2 nights @ $200 lodging, $100 incidentals** |
| Defensive expert deposition assumptions | **3 experts, all local, all video; each 16 hours prep, 8 hours depo, $1000 court reporter, $1000 video** |
| Anticipated law and motion | **MSJ re no evidence of fraud in inducement** |
| Trial staffing | **2 partners, 2 associates, 1 paralegal, 16 hours per day for 16 days** |
| Revision Number | *1* |
| As of: | *10/01/14* |

**FIGURE III-2. Sample Forecast Assumptions**

Not only does this level of detail lead to more accurate forecasting, but it allows the forecast to be revised quickly and easily when any of the underlying assumptions change.

### 3. Step 3: Assign Hour and Cost Estimates to Each Category

The next step is the most complex – but, if the preceding two steps have been completed thoughtfully and completely, is also the easiest and most mechanical. For each category of assumptions, estimate the forecasted number of partner, associate, and other hours, as well as the associated costs. A typical spreadsheet program such as Excel can then perform the associated arithmetic calculations automatically using the previously calculated blended rates, as shown in Figure III-3.

**Budget Detail**

Matter Name *Dirty Larry's v. Joe Clean*
Matter Number *123456*

| | Professional Fees | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Paralegals & Staff | | Associates | | Partners | | Costs | Total Fees | Total Fees and Costs |
| | Hours | Fees | Hours | Fees | Hours | Fees | | | |
| Pre-litigation investigation | | | | | | | | | |
| Document review | 10 | *$900* | 25 | *$3,281* | 5 | *$1,275* | $500 | *$5,456* | *$5,956* |
| Witness interviews | 5 | *$450* | 5 | *$656* | 5 | *$1,275* | $0 | *$2,381* | *$2,381* |
| Legal research | 1 | *$90* | 10 | *$1,313* | 2 | *$510* | $250 | *$1,913* | *$2,163* |
| Pleadings Phase | | | | | | | | | |
| Pleadings | 2 | *$180* | 20 | *$2,625* | 3 | *$765* | $500 | *$3,570* | *$4,070* |
| Pleading motions | 5 | *$450* | 50 | *$6,563* | 10 | *$2,550* | $300 | *$9,563* | *$9,863* |
| Provisional remedies | 5 | *$450* | 25 | *$3,281* | 5 | *$1,275* | $200 | *$5,006* | *$5,206* |
| Fact Discovery | | | | | | | | | |
| Documents | 50 | *$4,500* | 50 | *$6,563* | 5 | *$1,275* | $4,500 | *$12,338* | *$16,838* |
| Interrogatories/RFA's | 5 | *$450* | 30 | *$3,938* | 5 | *$1,275* | $250 | *$5,663* | *$5,913* |
| Discovery disputes | 5 | *$450* | 25 | *$3,281* | 10 | *$2,550* | $500 | *$6,281* | *$6,781* |
| Depositions | | | | | | | | | |
| Offensive fact | 20 | *$1,800* | 12 | *$1,575* | 28 | *$7,140* | $2,500 | *$10,515* | *$13,015* |
| Defensive fact | 10 | *$900* | 3 | *$394* | 19 | *$4,845* | $2,500 | *$6,139* | *$8,639* |
| Other factual investigation | 25 | *$2,250* | 50 | *$6,563* | 25 | *$6,375* | $0 | *$15,188* | *$15,188* |
| Experts | | | | | | | | | |
| Consultation | 25 | *$2,250* | 25 | *$3,281* | 50 | *$12,750* | $50,000 | *$18,281* | *$68,281* |
| Reports | | | | | | | | | |
| Offensive | 25 | *$2,250* | 50 | *$6,563* | 100 | *$25,500* | $500 | *$34,313* | *$34,813* |
| Defensive | 5 | *$450* | 25 | *$3,281* | 50 | *$12,750* | $100 | *$16,481* | *$16,581* |
| Depositions | | | | | | | | | |
| Offensive | 30 | *$2,700* | 24 | *$3,150* | 72 | *$18,360* | $17,700 | *$24,210* | *$41,910* |
| Defensive | 9 | *$810* | 12 | *$1,575* | 60 | *$15,300* | $6,000 | *$17,685* | *$23,685* |
| Expert fees and costs | 0 | *$0* | 0 | *$0* | 0 | *$0* | $125,000 | *$0* | *$125,000* |
| ADR | 5 | *$450* | 10 | *$1,313* | 16 | *$4,080* | $250 | *$5,843* | *$6,093* |
| Other settlement | 0 | *$0* | 0 | *$0* | 25 | *$6,375* | $0 | *$6,375* | *$6,375* |
| Other law and motion | 25 | *$2,250* | 50 | *$6,563* | 25 | *$6,375* | $500 | *$15,188* | *$15,688* |
| Other legal research | 10 | *$900* | 100 | *$13,125* | 25 | *$6,375* | $1,000 | *$20,400* | *$21,400* |
| Other case management | 0 | *$0* | 25 | *$3,281* | 25 | *$6,375* | $0 | *$9,656* | *$9,656* |
| Client communications | 0 | *$0* | 25 | *$3,281* | 50 | *$12,750* | $0 | *$16,031* | *$16,031* |
| Pre-trial preparation | 100 | *$9,000* | 200 | *$26,250* | 200 | *$51,000* | $10,000 | *$86,250* | *$96,250* |
| Trial | 256 | *$23,040* | 512 | *$67,200* | 512 | *$130,560* | $50,000 | *$220,800* | *$270,800* |
| Post-trial motions | 50 | *$4,500* | 100 | *$13,125* | 50 | *$12,750* | $1,000 | *$30,375* | *$31,375* |
| Appeal | 25 | *2,250* | 75 | *$9,844* | 50 | *$12,750* | $2,500 | *$24,844* | *$27,344* |
| **TOTALS** | **708** | ***$63,720*** | **1538** | ***$201,863*** | **1432** | ***$365,160*** | **$276,550** | ***$630,743*** | ***$907,293*** |

Revision Number *1*
As of: *10/01/14*

**FIGURE III-3. Sample Forecast Detail**

Using spreadsheet software to perform these calculations has tremendous advantages:

- First and foremost, it means that counsel does not have to reinvent the wheel with every forecast. Once the basic template is prepared, it can be reused an infinite number of times by simply re-entering new data.

- Second, the forecast can be easily manipulated to see the effect of changing underlying assumptions. If, for example, the client wanted John Q. Solicitor to have a greater role in the case, simply changing the partner time allocation on the first step automatically updates the revised total cost. Likewise, changing individual hour assumptions within the forecast is simply a matter of typing new numbers over old; the software recalculates the total cost automatically.

- Third, as a consequence, it becomes far easier to update the forecast as new information becomes available. If there are unanticipated motions or discovery, or if any underlying assumption becomes moot, the associated hour assumptions are simple to change.

- Finally, it becomes far easier to determine whether the forecast is accurate on an ongoing basis – simply a matter of checking the underlying assumptions (and associated hours) against what is actually happening in the case.

### 4. Step 4: Create a Timeline of Anticipated Expenses

The last step is optional: to create a timeline of the anticipated expenses. This step is primarily for budget-tracking purposes, and is generally unnecessary for purposes of risk analysis. It is generally helpful in determining whether forecasted expenses are being incurred at the pace at which they were anticipated. Figure III-4 shows a sample timeline.

## Timeline

Matter Name *Dirty Larry's v. Joe Clean*

Matter Number *123456*

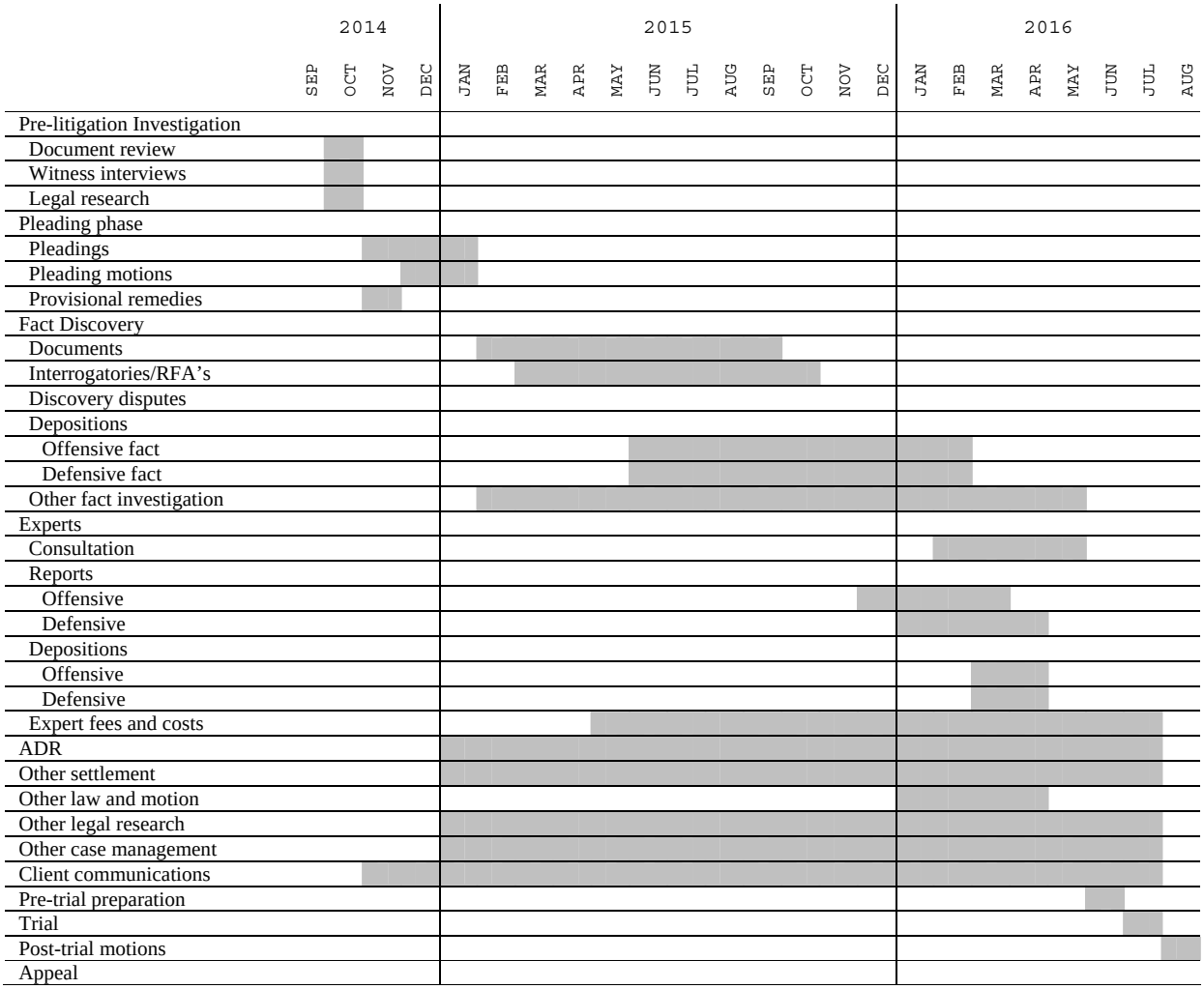


**FIGURE III-4. Sample Expense Timeline**

## IV. PRACTICAL CONSIDERATIONS

### A. Implications for Financial Disclosure

In the earlier sections we discussed the advantages to *any* franchisee or franchisor – large or small – of performing a risk analysis when involved in litigation. There are additional benefits for publicly traded companies, where a risk analysis can play an important role in assisting them to meet their disclosure obligations.

Corporations, and their officers and advisors, have always been at risk for failure to disclose litigation claims that result in a material adverse impact on the corporation.[43] That risk has been heightened with the adoption of the Sarbanes-Oxley Act of 2002.[44] Among other things, Section 302(a) of Sarbanes-Oxley requires a corporation's principal executive and financial officers each to certify the financial and other information contained in the corporation's quarterly and annual reports.[45]

The SEC has taken an aggressive posture regarding the significance of the certification statement required under Sarbanes-Oxley:

> The certification statement regarding fair presentation of financial statements and other financial information is not limited to a representation that the financial statements and other financial information have been presented in accordance with "generally accepted accounting principles." We believe that Congress intended this statement to provide assurances that the financial information disclosed in the report, viewed in its entirety, meets a standard of overall material accuracy and completeness that is broader than financial reporting requirements under generally accepted accounting principles. In our view, a "fair presentation" of an issuer's financial condition … encompasses the selection of appropriate accounting policies, proper application of appropriate accounting policies, disclosure of financial information that is informative and reasonably reflects the underlying transactions and events and the inclusion of any additional disclosure necessary to provide investors with a materially accurate and complete picture of an issuer's financial condition ….[46]

The standards for whether to accrue for or disclose pending litigation were established in the 1975 Statement of Financial Accounting Standards ("FASB") No. 5,[47] "Accounting for Contingencies." In relevant part, FASB No. 5 (or the "Statement") provides as follows:

**The provisions of this Statement need not be applied to immaterial items.**[48]

---

43 *See*, *e.g.*, *In re Anchor Gaming Secs. Litig.*, 33 F. Supp. 2d 889, 894 (D. Nev. 1998); *Freedman v. Louisiana-Pacific Corp.*, 922 F. Supp. 377 (D. Or. 1996); *Endo v. Albertine*, 812 F. Supp. 1479, 1487 (D. Ill. 1993).

44 15 U.S.C. § 7201 et. seq.

45 *Id.* at § 7241; s*ee also* Jenny B. Davis, *Sorting out Sarbanes-Oxley: Determining How to Comply with the New Federal Disclosure Law for Corporations Won't Be Easy*, 89 A.B.A.J. 44 (2003).

46 *Certification of Disclosure In Companies' Quarterly and Annual Reports*, Exchange Act Release No. 33-8124, *available at* http://www.sec.gov/rules/final/33-8124.htm at 7.

47 RESEARCH AND DEV. ARRANGEMENTS, Statement of Financial Accounting Standards No. 5 (Financial Accounting Standards Bd. 1975). 17 CFR 210.5-02(25).

48 *Id.* after ¶ 20, before signatures of members of Financial Accounting Standards Board. For all citations from FASB No. 5, emphasis in original unless otherwise noted.

3. When a loss contingency exists, the likelihood that the future event or events will confirm the loss … or the incurrence of a liability can range from probable to remote. This Statement uses the terms *probable*, *reasonably possible*, and *remote* to identify three areas within that range, as follows:

   a. *Probable.* The future event or events are likely to occur.

   b. *Reasonably possible.* The chance of the future event or events occurring is more than remote but less than likely.

   c. *Remote.* The chance of the future event or events occurring is slight.[49]

**Accrual of loss contingencies:**

8. An estimated loss from a loss contingency … shall be accrued by a charge to income if *both* of the following conditions are met:

   a. Information available prior to issuance of the financial statements indicates that it is probable that … a liability has been incurred at the date of the financial statements. It is implicit in this condition that it must be probable that one or more future events will occur confirming the fact of the loss.

   b. The amount of loss can be reasonably estimated.[50]

**Disclosure of Loss Contingencies**

10. If no accrual is made for a loss contingency because one or both of the conditions in paragraph 8 are not met, or if an exposure to loss exists in excess of the amount accrued pursuant to the provisions of paragraph 8, disclosure of the contingency shall be made when there is at least a reasonable possibility that a loss or an additional loss may have been incurred. [Footnote in original: For example, disclosure shall be made of any loss contingency that meets the condition in paragraph 8(a) but that is not accrued because the amount of loss cannot be reasonably estimated (paragraph 8(b)). Disclosure is also required of some loss contingencies for which there is a *reasonable possibility* that a loss may have been incurred even though information may not indicate that it is *probable* that … a liability had been incurred at the date of the financial statements.] The disclosure shall indicate the

---

[49] *Id.* at ¶ 3.

[50] *Id.* at ¶ 8.

> nature of the contingency and shall give an estimate of the possible loss or range of loss or state that such an estimate cannot be made.[51]

Examples of the application of the Statement to Litigation, Claims, and Assessments are contained in paragraphs 33 through 39, which provide in part:

> 33. The following factors, among others, must be considered in determining whether accrual and/or disclosure is required with respect to pending or threatened litigation and actual or possible claims and assessments:
>
> a. The period in which the underlying cause (i.e., the cause for action) of the pending or threatened litigation or of the actual or possible claim or assessment occurred.
>
> b. The degree of probability of an unfavorable outcome.
>
> c. The ability to make a reasonable estimate of the amount of loss.[52]
>
> 36. If the underlying cause of the litigation, claim, or assessment is an event occurring before the date of an enterprise's financial statements, the probability of an outcome unfavorable to the enterprise must be assessed to determine whether the condition in paragraph 8(a) is met. Among the factors that should be considered are the nature of the litigation, claim, or assessment, the progress of the case …, the opinions or views of legal counsel and other advisers, the experience of the enterprise in similar cases, the experience of other enterprises, and any decisions of the enterprise's management as to how the enterprise intends to respond to the lawsuit, claim, or assessment (for example, a decision to contest the case vigorously or a decision to seek an out-of-court settlement). The fact that legal counsel is unable to express an opinion that the outcome will be favorable to the enterprise should not necessarily be interpreted to mean that the condition for accrual of a loss in paragraph 8(a) is met.[53]

A strong argument can be made that performing a rigorous risk analysis (such as described in Section II of this paper) provides an excellent means of assessing some – but not all – of these factors. To understand which factors risk analysis can and cannot help assess, however, it is absolutely critical to understand the distinction between possible outcomes and the expected value. The expected value produced by a risk analysis is <u>not</u> a predicted outcome; it is merely the average of all predicted outcomes. Indeed, in most cases the

---

[51] *Id.* at ¶ 10.

[52] *Id.* at ¶ 33.

[53] *Id.* at ¶ 36.

expected value may not even be a possible outcome. To understand this point, consider a case in which there are two, mutually exclusive but equally likely outcomes: a $1 million recovery or a $1 million loss. The expected value is zero – but that is *not* a potential (or even possible) outcome.

Thus, although a risk analysis may be very helpful in estimating the probability and amount of any particular outcome, it will not necessarily dictate a FASB No. 5 accrual or disclosure. For example, if a risk analysis shows that there is a wide range of potential outcomes, each of which has a low probability of occurring, it may be that for FASB No. 5 purposes it is not "probable that one or more future events will occur confirming the fact of the loss" or that "the amount of loss can be reasonably estimated" – even if all of those potential outcomes and their respective probabilities lead to an "expected value." If, on the other hand, a risk analysis shows that a particular result is probable, reasonably estimable, and material, it can provide a much more defensible basis for an accrual than do less rigorous estimates.

A risk analysis may be particularly useful in the situation where a materially large verdict is ultimately imposed on a company, but where no disclosure had been made prior to the verdict. It is easy to imagine the company being subject to after-the-fact, second-guessing by private litigants or the government.[54] Although an absolute defense to such claims would not follow from the mere fact that counsel had based their non-disclosure decision on the results of a careful risk analysis performed before-the-fact, we believe such an analysis would be more persuasive to a trier than the more traditional opinion of counsel.[55] For example, the former would typically show more clearly than the latter that (i) the projected liability was "immaterial" overall (thus taking the loss contingency outside the scope of FASB No. 5) and (ii) the only scenarios in the decision tree with the magnitude of the actual verdict had just a "remote" probability of occurring.

On the other hand, the corporation should recognize that once a risk analysis is undertaken, it will be difficult to avoid addressing the FASB No. 5 questions regarding whether the degree of probability of an unfavorable outcome – for a claim that is material – is "probable" or "reasonably possible."[56] Of course, depending on the stage of the pleadings, the amount of

---

[54] *See generally*, *In re Anchor Gaming Secs. Litig.*, 33 F. Supp. 2d 889, 894 (D. Nev. 1998); *Freedman v. Louisiana-Pacific Corp.*, 922 F. Supp. 377 (D. Or. 1996); *Endo v. Albertine*, 812 F. Supp. 1479, 1487 (D. Ill. 1993).

[55] One note of caution: using the results of the analysis as a defense in a shareholder suit or a governmental proceeding could waive any claims of attorney-client privilege or work product under the fairness doctrine. *See e.g. United States v. Doe (In re Grand Jury Proceedings)*, 219 F.3d 175, 182 (2d Cir. 2000); *McGrath v. Nassau County Health Care Corp.*, 204 F.R.D. 240, 243 (E.D.N.Y. 2001); *Glenmade Trust Co. v. Thomson*, 56 F.3d 476 (3d Cir. 1995). A party waives the privilege by "asserting a claim that in fairness requires examination of protected communications." *McGrath,* 204 F.R.D. at 243 (*quoting United States v. Bilzerian*, 926 F.2d 1285, 1292 (2d Cir. 1991)). But note that this result should follow equally from the use of either a traditional opinion letter prepared by counsel or a more quantitative risk analysis performed by counsel. And since the need for the defense only arises once there has already been an adverse judgment in the underlying matter, there should be little or no risk to sharing the before-the-fact analysis if necessary to defend the follow-on litigation.

[56] Of course, "probable" and "reasonably possible" – even with the definitions given in paragraph 3 of the Statement, of "likely" and "more than remote (or 'slight') but less than likely," respectively – are highly ambiguous. For example, one of the authors, Marc Victor, has conducted experiments that show that while some laypeople (not just attorneys) would define "likely" as 51%, many would define it as 80% (or even more). *See also* the American Bar Association's definition of "probable" in § IV.B *infra*. This ambiguity may provide a reasonable basis in many suits for avoiding the "probable" threshold necessary to require an accrual under paragraph 8(a).

*(Footnote continued on next page)*

legal research and discovery that has taken place, and the substance of any memorandum prepared by counsel, it may be difficult to avoid addressing these questions even without having performed a formal risk analysis.

### B. Implications for Audit Inquiry Responses

Risk analysis may also be relevant to the responses of outside counsel to auditors' requests for information made on behalf of clients. There is considerable literature regarding a lawyer's obligations in responding to such audit inquiry requests, and in general this topic is beyond the scope of this paper. It is important, however, for a lawyer to keep in mind that if he or she had been involved in performing a risk analysis on behalf of a client in connection with a claim, the lawyer must carefully consider the results of that analysis when responding to the audit inquiry letter.

The American Bar Association has promulgated a Statement of Policy Regarding Lawyers' Responses to Auditors' Requests for Information, otherwise known as "The Treaty."[57] It sets forth guidelines that lawyers should use in responding to such audit inquiries. In relevant part, it provides that a lawyer normally should only provide an opinion regarding the outcome of a litigation where it appears that the likelihood of an unfavorable result is either "probable" or "remote." The Treaty defines those terms as follows:

> (i) *Probable* – an unfavorable outcome for the client is probable if the prospects of the claimant not succeeding are judged to be extremely doubtful and the prospects for success by the client in its defense are judged to be slight.
>
> (ii) *Remote* – an unfavorable outcome is remote if the prospects for the client not succeeding in its defense are judged to be extremely doubtful and the prospects of success by the claimant are judged to be slight.[58]

Clearly, where a risk analysis has been performed regarding a specific claim, the lawyer should carefully consider that analysis in determining whether an unfavorable outcome is either "probable" or "remote" under the Treaty, as defined above. The risk analysis may also be

---

*(Footnote continued from previous page)*

As for the disclosure obligations under paragraph 10, while many more suits may trigger the "at least a reasonable possibility that a loss may have been incurred" language, remember that the disclosure obligation is then to "indicate the nature of the contingency and give an estimate of the possible loss or range of loss or state that such an estimate cannot be made." (Emphasis added.) It can be easily argued that the word "reasonable" should be inserted before "estimate of the possible loss or range of loss" in light of (i) the use of that term in condition 8(b) and (ii) the footnote to paragraph 10 itself. Furthermore paragraph 39 implies that where "the range of possible loss is wide," which is what most litigation decision trees realistically portray, it will not be possible to provide a reasonable estimate — or at the most, one would simply have to disclose that the range of loss was from some minimal amount up to the full amount of plaintiff's claim. And once again, see the ABA's approach to this same issue in § IV.B *infra.*

[57] American Bar Association, *Statement of Policy Regarding Lawyers' Responses to Auditors' Requests for Information,* 31 BUS. LAWYER 1709-45 (1975).

[58] *Id.* at 1713. The Treaty's definition of "probable" and "remote" differ from the FASB No. 5 definition of those terms. While the two definitions of "remote" appear reasonably close to one another, the Treaty's definition of "probable" is more rigorous than the FASB No. 5 definition of the term. Thus, an unfavorable litigation result could be "probable" under FASB No. 5 while not "probable" under the Treaty.

relevant where lawyers are asked to estimate, in dollar terms, the potential amount of loss, or a loss range (so long as the lawyer keeps in mind the distinction, described above, between potential outcomes and expected value). The Treaty provides that it is appropriate for a lawyer to provide such estimates "only if he believes the probability of inaccuracy of the estimate of the amount or range of potential loss is slight."[59]

Not infrequently, lawyers' responses to audit inquiry letters contain a statement to the effect that the lawyer has reached "no opinion" regarding the likelihood of an unfavorable outcome or the amount of a possible loss. Such statements of having formed "no opinion" are not required by the Treaty, and are generally inadvisable because they provide more information than lawyers are generally required to provide in response to an audit inquiry letter under the treaty. Such statements of having formed "no opinion" must especially be avoided, however, where a risk analysis has been performed, as such analyses are replete with counsel's subjective probabilities – even though those opinions may not warrant disclosure under the applicable standards of certainty (e.g., "probable" or "remote").

With the advent of Sarbanes-Oxley, lawyers' responses to audit inquiry letters place an additional burden on attorneys that makes them subject to significant sanctions if they provide misleading information or fail to report evidence of a material violation of federal or state law committed by the corporation.[60] Here, as with the disclosure obligations of corporations and their high level executives, judgments made by lawyers regarding what needs to be disclosed in response to audit inquiry letters can end up being closely scrutinized by the courts and juries. When faced with such after-the-fact scrutiny, a lawyer should be well-served by being able to point to a responsibly performed risk analysis as the basis for his or her identification and description of claims in response to an audit inquiry letter.

### C. Discoverability

As previously noted, using the results of a risk analysis as a defense in a civil lawsuit or governmental proceeding could waive any claims of attorney-client privilege or work product under the fairness doctrine.[61]

Even if not used as a defense, however, there is a decisive split of authority as to whether or not an attorney response to an audit inquiry letter waives the attorney-client privilege and/or work product doctrine for those communications by the client to the attorney that are used to formulate a response to the audit inquiry.[62] The discussions focus on federal courts, but there may be some additional protections in state courts because a minority of states recognize an accountant-client privilege.

---

59 *Id.* at 1714.

60 *See* 15 U.S.C. §§ 7242 and 7245 and the SEC's corresponding rules at 17 C.F.R. Part 205 and 240; *see also* Jenny B. Davis, *Sorting Out Sarbanes-Oxley: Determining How to Comply with the New Federal Disclosure Law for Corporations Won't Be Easy,* 89 A.B.A.J. 44 (2003).

61 *See supra* note 55.

62 *See* Andrew M. Apfelberg and William McC. Wright, *Responding to Audit Inquiry Letters: Working with Your Client to Provide Full Disclosure While Protecting Sensitive Information*, 1999 AM. BANKR. INST. J. LEXIS 104, *2-3 (July 1999); John W. Allen, *Walking Through the Minefield - Ethical and Liability Risks in Auditor Response Letters*, 77 FLA. BAR J.10, 15-16 (2003); Melissa D. Shalit, Note, *Audit Inquiry Letters and Discovery: Protection Based on Compulsion*, 15 CARDOZO L. REV. 1263, 1263-64 (1994).

Certain federal courts have held that the response and materials used to prepare the response are not discoverable because the creation of the document would not have occurred without the existence of related litigation.[63]

Conversely, other federal courts have held that the response, drafts and underlying documentation submitted by the client to the attorney or by the client or attorney to the accountant/auditor may all be discoverable by your client's adversary because the information from the client has been shared with a third party, namely the accountant, and there is no federal accountant-client privilege under federal common law or federal rules of evidence.[64]

Despite the *possibility* of disclosure, it is important to note that there have been no cases cited or found to date that required disclosure to an adversary of a response to an audit inquiry done in regard to litigation pending against that adversary. Those cases that did compel disclosure compelled the disclosure to the government or to an adversary in regard to an audit inquiry response regarding litigation pending between some third party and the responding party.

This is an important distinction because the risk of disclosing the audit response and the underlying risk analysis is less detrimental to the disclosing party when disclosure occurs to the government or a third party. If the results were disclosed to the government or a third party, it would generally be done because the responding party was being challenged for its failure to disclose the details of some underlying litigation. In that case, the disclosing party could disclose the risk analysis as a shield against potential liability for not disclosing the underlying litigation because, for example, it did not meet the materiality requirements. If, conversely, the party was forced to disclose the risk analysis to an adversary in the underlying litigation, then that adversary could seek to use the analysis as an element of proof of the legitimacy or value of the litigation. Note, however, that to the extent there is any risk of disclosure, that disclosure risk would be no different than if counsel's audit response had been based on a more traditional, qualitative evaluation of the merits of the underlying claimant's case and what should be offered in settlement.

### D. Client Relations – One Client's Perspective

As you have probably inferred by now, the in-house author of this paper is (like his co-authors) a strong proponent of risk analysis. That said, he and his colleagues at Hilton have discovered that implementing risk analysis as a regular feature of litigation management is easier said than done. For the benefit of other in-house departments considering implementing

---

63 *See* Apfelberg, at *2-3; Shalit, at 1264-65; *e.g. S. Scrap Material Co. v. Fleming*, 2003 U.S. Dist. LEXIS 10815 (D. La., 2003); *Tronitech, Inc. v. NCR Corp.*, 108 F.R.D. 655 (S.D. Ind. 1985); *United States v. Arthur Young & Co.*, 1984 U.S. Dist. LEXIS 22991 (D. Okla. 1984)(The court held that attorney responses to a set of audit inquiries was protected, but then said "The Court should be quick to point out it is not herein saying all communications between corporate counsel and its independent auditing firm are impressed with the attorney work product privilege. Each case must be judged in light of its particular facts and circumstances.").

64 *See* Apfelberg, at *2-3; Shalit, at 1264-65; *e.g. In re Grand Jury Proceedings, United States of America v. Under Seal*, 33 F.3d 342 (4th Cir. 1994); *In re Raytheon Secs. Litig.*, 218 F.R.D. 354, 359 (D. Mass. 2003)(noting, in dicta, that responses to audit inquiry letters do not enjoy privilege or work-product protection to the extent that the information in the responses must be disclosed in the company's financial disclosures); *Vanguard Savings and Loan Assoc. v. Banks*, 1995 U.S. Dist. LEXIS 13712 (E.D. Pa. 1995); *Independent Petrochemical Corp. v. Aetna Cas. & Surety Co.*, 117 F.R.D. 292 (D.D.C. 1987); *Hillsborough Holding Corp. v. Celotex Corp.*, 132 B.R. 478 (Bankr. M.D. Fla. 1991).

risk analyses, and for outside counsel who may be asked to perform them, here are some of the lessons Hilton has learned and the observations it has made.

First and foremost, a client does not need any threshold level of size or sophistication to require outside counsel to perform a risk analysis. A small client with limited (or no) in-house resources can just as easily ask outside counsel to conduct an analysis as a Fortune 500 company such as Hilton. Arguably, in fact, the lesser the legal sophistication of the client, the greater the justification for conducting a risk analysis, given its objective to translate legal uncertainties into understandable terms for ordinary business decision makers.

Likewise, outside counsel do not require any particular size, sophistication or resources to perform risk analyses; a sole practitioner can perform one as easily as a megafirm. The basic skill required for a risk analysis is a fundamental one for any competent lawyer: the ability to identify legal issues, evaluate evidence, and make an informed assessment as to the likelihood of potential outcomes. The mechanics of constructing a decision tree are, by comparison, easily learned and mastered – particularly given the advent of decision tree software, which has eliminated much of the time and effort previously required to learn and implement tree design.

You might think, therefore, that a company with the size and resources of Hilton would regularly require risk analyses in all but the most routine litigation. Historically, however, Hilton has used risk analyses only in a few limited situations:

- Where Hilton is a potential plaintiff and, accordingly, has control over whether to incur the expense, disruption, uncertainty and delay of litigation. In some instances, Hilton has foregone litigation after learning from a risk analysis that the expected value would either be swallowed up by the forecasted costs or would simply not justify the non-monetary costs. In other instances, risk analyses have provided powerful justification for proceeding with otherwise daunting litigation.

- To determine settlement value of an ongoing case, most often in connection with a mediation or settlement conference. In these instances, the analysis is obviously less exhaustive than it would be at the outset of a case, since many potential uncertainties will already have been eliminated.

Going forward, Hilton is considering using risk analyses for other purposes as well, such as:

- For budgeting purposes. The budgeting model described in Section III of this paper is closely modeled on the one currently used at Hilton for litigation beyond a minimum dollar threshold. Hilton strongly believes in the approach advocated in this paper, i.e., that performing the budget process in conjunction with a risk analysis leads to a more carefully-considered, and therefore reliable, budget. Therefore, while Hilton already requires a budget and matter plan at the outset of every case, it is considering also requiring a risk analysis to increase the reliability of both the budget and the plan.

- For evaluating outside counsel's performance, both in terms of success on the merits and cost management. A case is only as good as its facts, after all, and losing a horrible case is no more a reflection on outside counsel than winning the sure thing. Likewise, the expense of litigating a case can only be measured in comparison to the stakes involved and the size and complexity of the issues, and spending $10,000 on a small

debt collection could be far more reprehensible than spending $1,000,000 on a complex commercial case.

- For evaluating the cost-effectiveness of specific options during a case. As discussed earlier in this paper, a client could evaluate, for example, whether the potential benefit of prevailing on a given motion is justified by its cost and chances of success.

- For assisting a mediator in identifying the material issues preventing a settlement. If both sides to a mediation can agree on the structure of a decision tree – that is, on the material issues and the potential outcomes – each side could theoretically provide confidential analyses to the mediator with their respective assessments of each issue. Without sharing those evaluations with the opposing party, a mediator would be able to identify and focus on the issues on which the parties' assessments differ most widely and which have the greatest impact on each sides' calculation of the case's settlement value.

In all of these situations, Hilton recognizes the admonition made elsewhere in this paper: not to be misled by the false air of mathematical precision that a risk analysis can convey. A risk analysis is only as sound as its underlying assessments. When the analysis consists of only a few issues, the expected value can be very sensitive to the probability assessed for a particular issue, and if it is even slightly unrealistic there can be a significant distortion in the overall case value. On the other hand, when there are many issues involved in an analysis, there are more opportunities to give unrealistic probability assessments, especially because each issue may not get the same level of attention as when there are only a few to evaluate. Then, as was discussed in Section I, the effect of combining several unrealistic assessments can again lead to a significant distortion in case value. While it is important to be cognizant of these "reliability" issues (and to utilize the techniques discussed in Section II.B.3 to reduce the chance of assessing unrealistic probabilities), we find that performing a risk analysis is still preferable to the seat-of-the-pants alternative.

The greatest obstacle that Hilton has faced in using risk analyses, however, has been getting outside counsel to perform them. We described earlier in this paper some of the numerous reasons (some reasonable, some less so) why lawyers are reluctant to forecast costs and outcomes. Clients can alleviate or eliminate many of those obstacles by, for example, treating time spent on forecasts and risk analyses as billable; actively participating in and assisting the process; providing software, templates, and other resources; not treating forecasted costs as caps; and making sure that both the client and outside counsel know that risk analysis is about evaluating the likelihood of a range of potential outcomes, not predicting a particular one. Ultimately, however, lawyers are human beings, and like all human beings will resist doing what is unfamiliar and potentially embarrassing if wrong.

If risk analyses are to become a regular part of the litigation landscape, it will not be because clients demand them; it will be because lawyers willing and able to perform them will have a competitive advantage over those who are not. From Hilton's perspective, a lawyer that produces a reliable risk analysis demonstrates that he or she has identified and understands the issues, knows what evidence needs to be assembled and what the consequences of that evidence will be, is aware of the relationship between the costs of litigating a case and the potential recovery or loss, and can manage the case accordingly. Lawyers that offer that service proactively, rather than producing it (if at all) only when required, are far more likely to get Hilton's business.

## V. CONCLUSION

Risk analysis is, to some extent, nothing new; it is simply evolving – and outside counsel are not the only ones now being expected to perform these analyses. Two years ago, the Seventh Circuit held that a trial judge reviewing a proposed class action settlement should essentially perform a risk analysis:

> [T]he judge should have made a greater effort (he made none) to quantify the net expected value of continued litigation to the class, since a settlement for less than that value would not be adequate. Determining that value would require estimating the possible outcomes and ascribing a probability to each point on the range ….[65]

After outlining a hypothetical valuation of a litigation and calculating its net expected value, the court continued:

> … our point is only that the judge made no effort to translate his intuitions about the strength of the plaintiff's case, the range of possible damages, and the likely duration of the litigation if it was not settled now into numbers that would permit a responsible evaluation of the reasonableness of the settlement.[66]

Seventh Circuit practitioners will recognize that the economic approach to this issue may have been driven by the opinion's author, Chief Judge Posner. To brush off the opinion as just another example of "law and economics" run wild, however, would be a mistake. If clients and circuit judges now expect risk analyses, judges, mediators, shareholders, and the SEC may not be far behind. Outside counsel had better be ready.

---

65 *Reynolds v. Beneficial National Bank*, 288 F.3d 277, 284-85 (7th Cir. 2002) (emphasis added).

66 *Id.* at 285 (emphasis added).