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## STRUCTURE THROUGH TO THE NET (OUTCOMES)

As the reader knows, on the right-hand side of the tree are the possible story endings—the outcomes. It's important to work with *net* outcomes or *net* payoffs—*after* subtracting amounts to be expended from amounts that may be won. Our task in constructing a decision tree, even one focused on litigation risk analysis, is to consider what decision to make in light of all possible outcomes and their respective probabilities, and in light of costs to get there.

It would be foolish to choose one path over another because it leads to a larger pot of gold, without also counting the gold coins I will lose (or theoretically gain) along that path. If my game ticket will win \$1,000 or \$2000 or \$3000, or maybe \$0, I might be willing to sell that ticket at a certain price, depending upon the probabilities. But if I have to pay \$250 or \$500 for a ticket to play, I might be willing to sell the ticket for a much different amount. And, if I will value or take pleasure in the game itself, my ticket price will also be different.

Some have criticized the application of decision analysis to legal cases because users—mediators and lawyers—fail to account for costs, risk aversion, or other intangibles.<sup>1</sup> In reality though, this criticism is of misapplication of the method. This author cringes to learn of those who purport to use decision analysis and yet completely ignore costs, intangibles, and risk. Any respectable textbook or article on decision analysis will explicitly require that its calculations include consequential costs from the time of the analysis going forward. Software (TreeAge) invites the tree-builder for legal cases to create payoff formulas, contemplating that attorneys' fees and other costs will be subtracted from the plaintiff's anticipated positive "payoffs" and added to the defense's potential negative payoffs.<sup>2</sup> Unless the actual costs—lawyer's and experts' fees—will be entirely insignificant in comparison to the litigation's stakes, there's no excuse for omitting costs from final outcome estimates to which analysis will be applied.

This section highlights the importance of structuring the "pay-off" as a net number and offers advice on how to do it. That net pay-off should include anticipated damages (positive or negative, depending upon who will be paying and who receiving) minus the costs of getting *from the moment of decision to that end point*. At a minimum, if the outcome is measured in dollars, then the dollar costs should

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<sup>1</sup> Aaron, Marjorie and Brazil, Wayne, "Shaking Decision Trees for Risks and Rewards," *Dispute Resolution Magazine* 22, no. 1 (2015): 10-18.

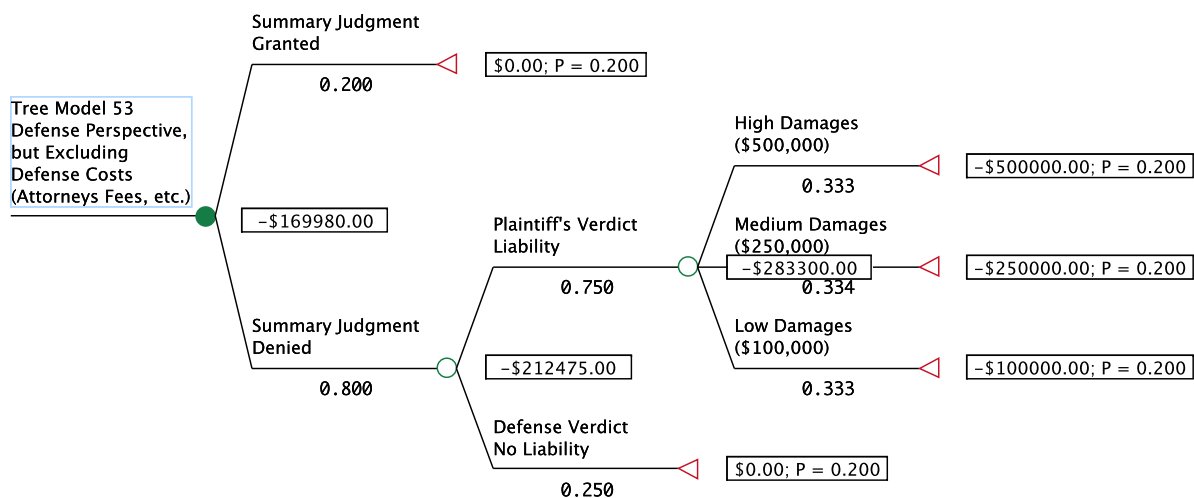
<sup>2</sup> Technically, estimated verdict amounts should include any statutory interest and should adjust future payoffs by discounting for time value of money. Particularly in the days of higher general interest rates and when final judgment is far in the future, the tree builder is encouraged to calculate the time value of the future monetary award. A somewhat less-technical approach can be excused—skipping the present value discount, for example—in a time limited mediation or for a lawyer reluctant to hike his bill. As always, the relevant question is whether the difference will be significant.

be subtracted. Thus, as the lawyer tree builder works his way to the end point of the various paths, he should not only ask: “What is the best estimate of this damages amount?” He must also ask: “What will the attorneys’ fees and the experts’ fees be between now and then? What other expenditures will the company have to make from here on in?” These questions should be built into the process, set out as blanks to plug into the arithmetic formula for deriving end values, before rolling back the tree.

As a best practice, intangible and less direct but consequential costs and gains should also be included. While some intangibles are more easily translated to dollar values than others, it is generally worth some effort. Chapter Eight in this text suggests some ways to consider intangibles in the analysis and client discussion.

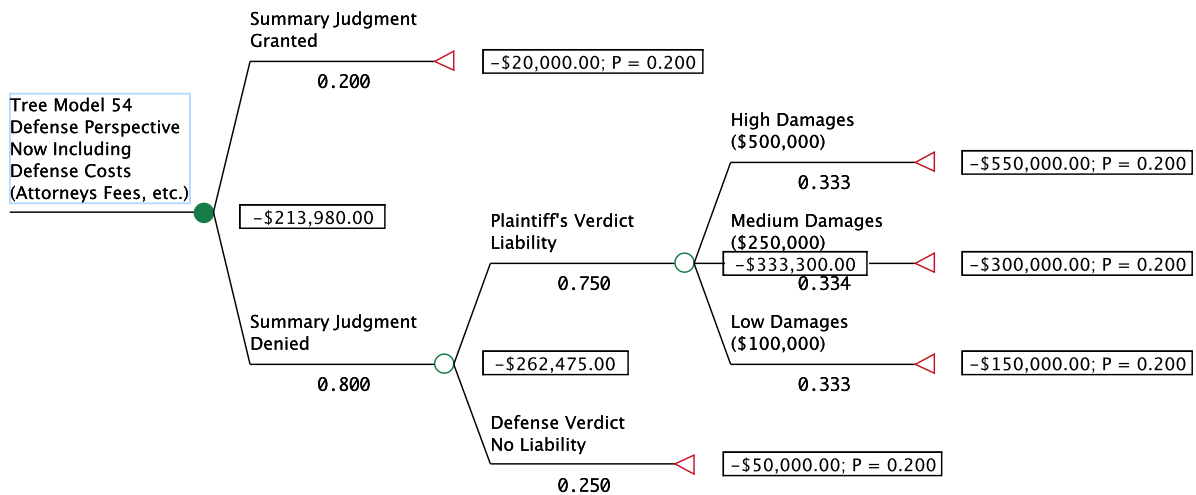
### Within Range of Significant Net

Many, if not most, litigated cases fall within a dollar value range such that including attorneys’ fees and other costs in net payoffs makes a significant difference in the economics of the decision. Consider how many of your cases involve potential outcomes that are less than \$500,000, with attorney’s fees and costs projected at \$50,000 or more. Imagine that, when you roll back and boil down the decision tree analysis—WITHOUT calculating fees, at the far right side of the tree, there’s an overall 40% chance of \$0 award (via 20% chance of summary judgment, and 25% chance of the defense prevailing at trial, if summary judgment is denied. Assume a very sympathetic plaintiff). This would yield a 60% overall chance of a defense liability, with a 20% chance of verdict at \$100,000, 20% at \$250,000 and 20% at \$500,000. That tree would roll back to an overall EMV of just under \$170,000. (It would be \$170,000 exactly but for the assignment of a probability of .334 to the median branches, instead of .333, or 1/3, to make the probabilities at each branch sum to 100%.)



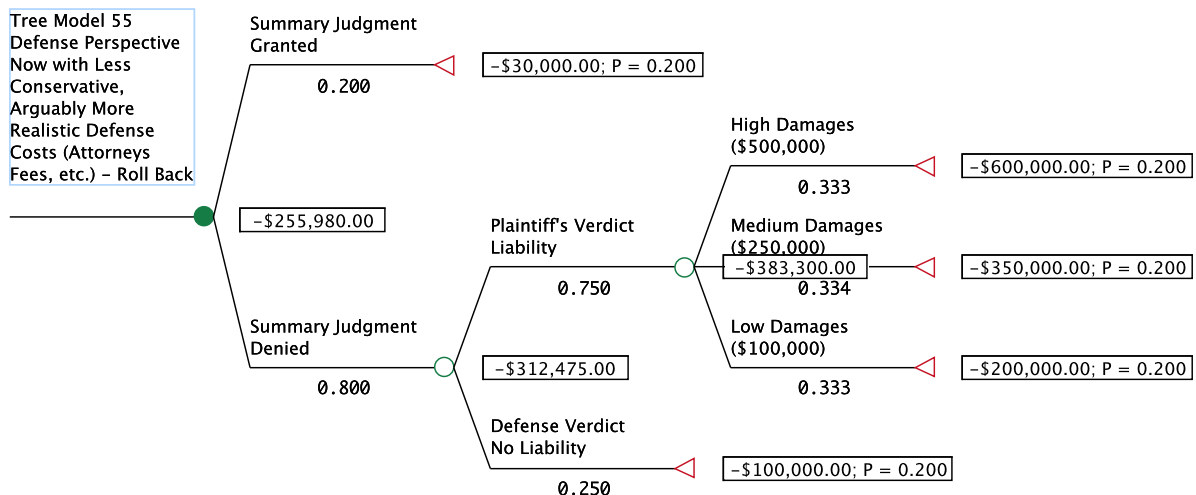
Now, take the same tree and add in the cost of attorneys’ fees and costs at \$50,000 if the case goes to trial, but only \$20,000 if the case is dismissed on summary judgment.

That same tree would roll back to an EMV of approximately \$214,000, as shown next.

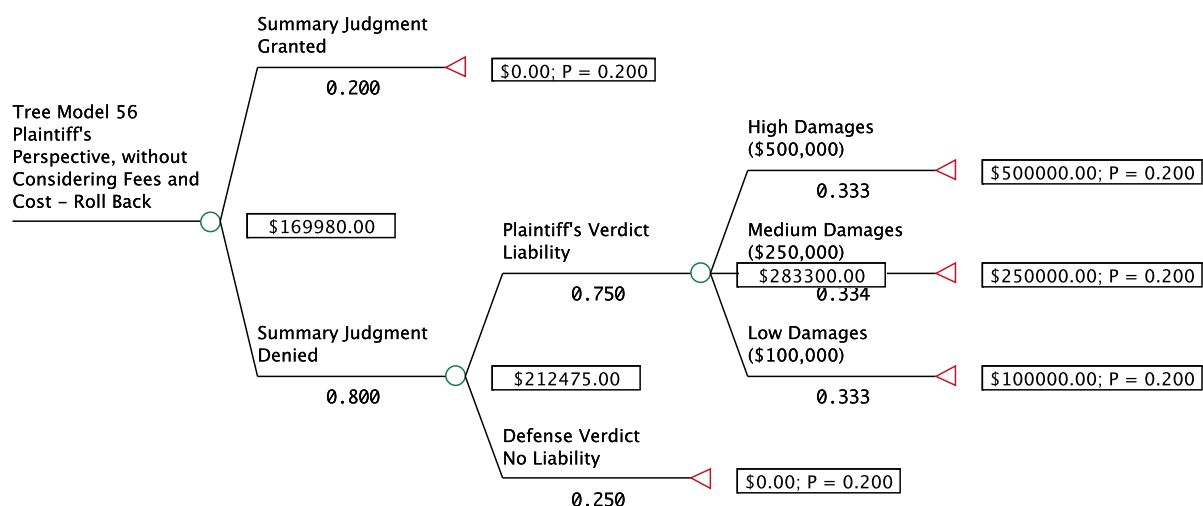


Obviously, my attorneys' fee estimate may be too conservative for labor-intensive cases with many depositions, much witness preparation, and expensive experts.

The EMV would be approximately \$256,000, assuming \$100,000 in costs and fees (from the date of decision) through trial, \$30,000 through summary judgment, as shown next.

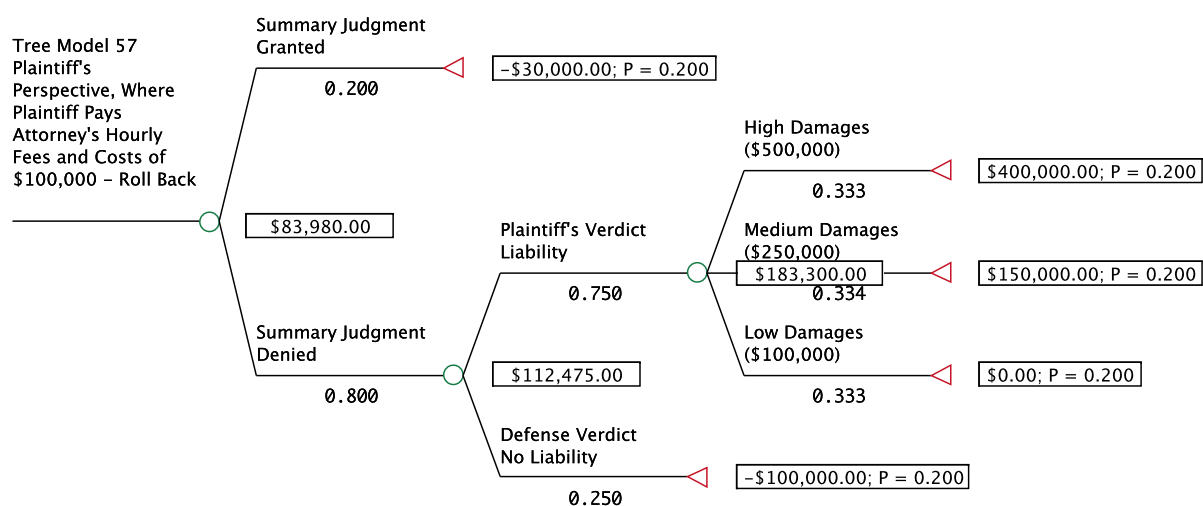


On the plaintiff's side, wherever the plaintiff is responsible for attorney's fees at an hourly rate, including those fees in the calculation has a parallel, if not more dramatic impact. Using the same hypothetical case, the plaintiff's EMV would be \$170,000 without including fees and costs.



Without showing yet another tree, I hope the reader will accept that, if the plaintiff's estimated fees and costs were estimated at \$50,000, the EMV would be approximately \$126,000.

What if \$100,000 is a better estimate of the plaintiff's attorneys' fees and other costs? (Assume \$30,000 through summary judgment and \$100,000 through trial.) There the results are dramatic: the plaintiff's EMV is reduced to approximately \$84,000, as reflected on the tree below.

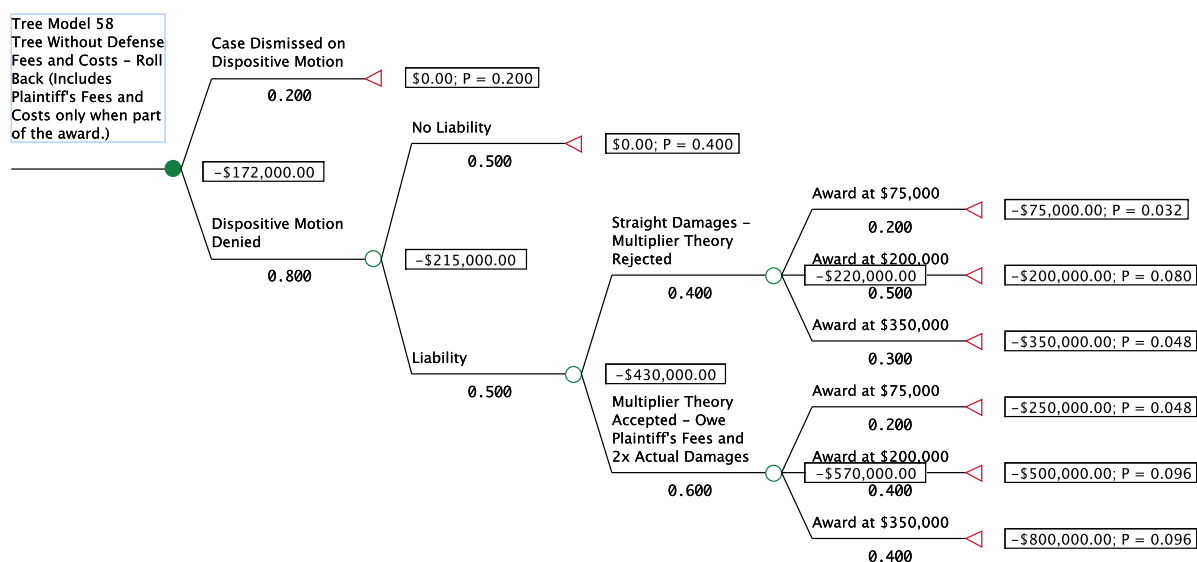


Not surprisingly, the impact of adding or subtracting fees and costs into the net payoff weakens as the potential award range grows. For rare cases involving potential exposure or gain in the millions (or multiple millions), with fee and cost estimates a small percentage, they become a less critical element of the computation.<sup>3</sup>

<sup>3</sup> Pushing people toward settlement is not the purpose of this piece. Thus, I have refrained from inclusion of musings about how cost and fee estimates may become motivations for settlement even in large cases. For readers in the role of settlement counsel or mediators, it is worth thinking and asking about.

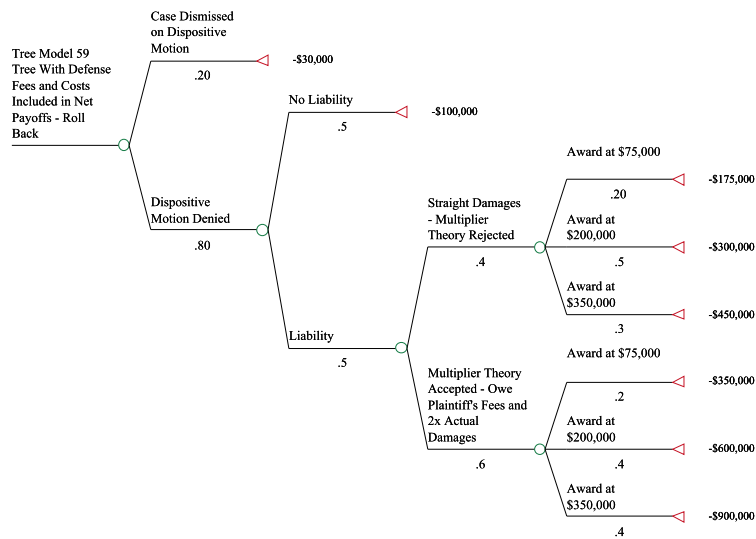
Here's one last illustration, using a hypothetical case in a not-so-unusual dollar range.<sup>4</sup> Imagine that there's a potentially dispositive preliminary motion, with a relatively low chance of success. The plaintiff could win damages within a certain range, or the plaintiff could succeed on some type of fraud or punitive claim or any theory that would, at minimum, enable the plaintiff to collect her attorneys' fees from the defendant, as well as double damages. Let's assume that if the plaintiff wins on liability, the base damages would be \$75,000, \$200,000, or \$350,000, depending on how the evidence comes in and what the jury believes. Now, let's assume further that defense costs will be approximately \$30,000 through the dispositive motion (including discovery, which is only partially complete), and an additional \$70,000 through trial. Finally, let's assume that plaintiff's counsel's "reasonable fees and costs" through trial would be \$100,000.

Here's what the tree would look like from the defense perspective WITHOUT considering anyone's costs or fees. Note that the EMV is \$172,000.



The next tree shows what it would look like AFTER including costs and fees the defense would be responsible for paying. Note that the EMV is -\$258,000.

<sup>4</sup> Aaron and Brazil, 16-17.



For the defense client who chooses to be guided by this analysis in making settlement decisions, it would be misleading to omit these fees and costs. They will be real when incurred, and will come out of cash reserves just as the judgment will. In fact, the costs and fees will come out sooner.

### Shortcuts Risk Shorting Communication Value

The weary lawyer or mediator determined to build a decision tree for a client's case might ask: "Why can't I build the tree without costs and just SAY to my client, 'Of course on top of that will be your fees and costs in \$X amount'...?" Theoretically, he can and that would be better than nothing. But one important reason to include those fees and costs in real net pay-off numbers is known as "measurability bias."<sup>5</sup> Humans tend to ascribe too much weight to what is measured and counted, and too little weight to what is not. Take something out of numbers, and we are less likely to assign it importance when making a decision. This is a problem for intangibles that are hard to measure and count and yet really will matter to the client. Given that costs and fees are estimable, numerical, and thus countable, excluding them from end "pay-off" values creates an unnecessary distortion.<sup>6</sup>

Consider the following hypothetical regarding the measurability bias in action. The defense's business representative reports to his boss: "Our lawyer's decision tree analysis pointed to a logical settlement value in the range of \$350,000, with a worst case damages number of \$750,000, a low estimate of \$150,000 and a 40% chance of a defense verdicts. Of course, he also said we should consider the fees and costs that could be in the \$100,000 range." I can just hear the client asking for corporate authority to settle for \$350,000, or \$300,000 or less, focusing on the EMV as stated, and the idea that less is a

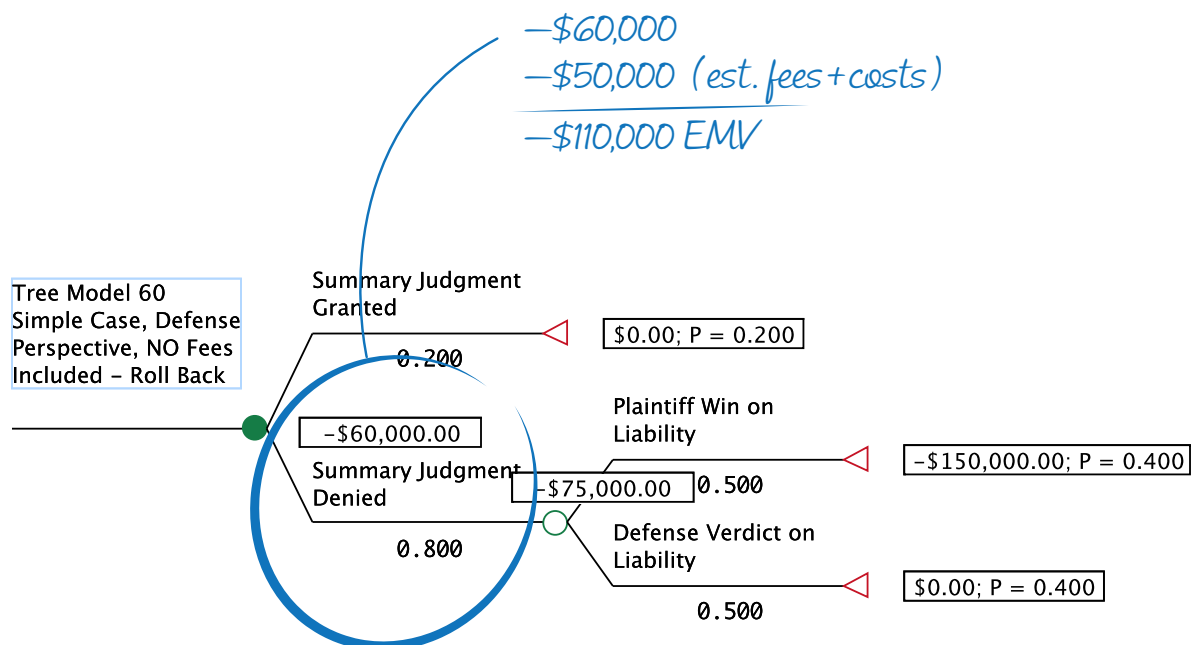
<sup>5</sup> See: Hall, Brian and Staats, Trent, "Do the Numbers Get in Your Way?" *Negotiation* 7, no. 11 (2004).

<sup>6</sup> Some tree builders may be tempted to take the short cut of subtracting total fees and costs from the Estimated Monetary Value, in other words, AFTER the Roll back.

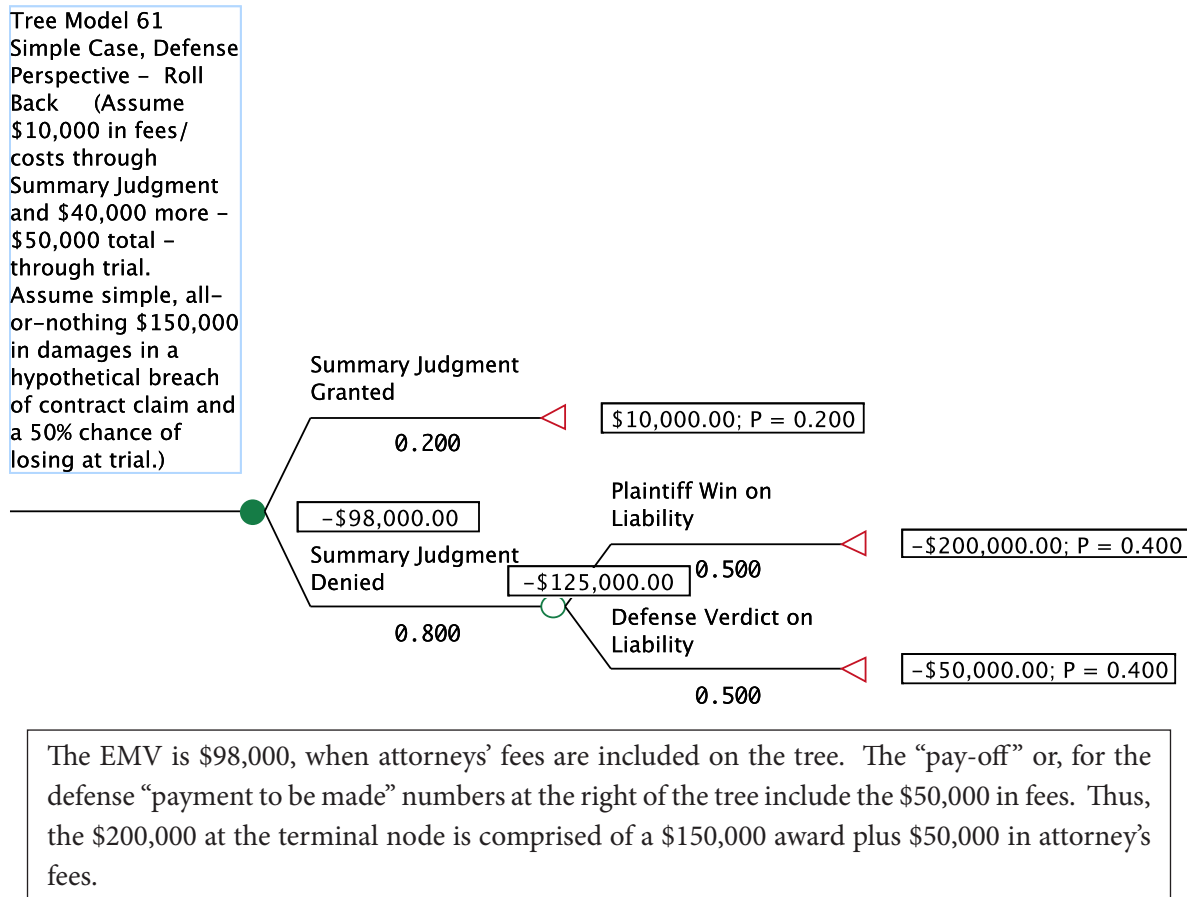
If those fees and costs will be exactly the same—no matter what the result—this would be fine. However, where an early dispositive motion could end the case with lower fees, as in the example above, we would be OVER weighting the costs and fees to subtract their total from Estimated Monetary Value. Moreover, in the example above, the defense tree should only count plaintiff's estimated fees on branches where they would be due—branches reflecting plaintiff's win on more punitive theories.

bargain or a strategic negotiation win. Costs are just as real a part of any outcome. Leaving them out of the EMV analysis falsely diminishes their reality and their force. The client may elect to set different settlement limits and aspirations, if presented with an EMV of at least \$400,000, based on net payoffs that include those costs.

The other common and problematic practice is to subtract or add the costs on top of an EMV calculated from payoffs without costs. This results in mathematical inaccuracy in any case where attorneys' fees and other costs will differ depending on the case's path. Imagine that the decision analyst lawyer represents the defendant company in an employment discrimination case with a 20% chance of summary judgment. The attorney's fees through summary judgment would be a fraction of the attorneys' fees and experts' costs to be expended if the case goes to trial. The EMV or roll back number for the entire "value" of the case—the weighted average of all possible outcomes—includes a 20% discount for the possibility that summary judgment will be granted and the plaintiff will collect \$0. Thus, subtracting the *full* estimated fees & costs overweighs them and distorts the EMV, as is evident when you compare Tree Model 60 and Tree Model 61.



As shown on the next tree, when accurate fees and costs are placed at each end point, they are weighted appropriately within the analysis.



On the other hand, if (and only if) fees and costs will be the same no matter what, it shouldn't matter whether you calculate an EMV and then subtract fees and costs or enter them in the net payoffs and then roll back the tree.

### Anticipate Occasional Resistance

The lawyer decision analyst, especially one who deals with clients, may predictably raise at least two objections regarding the inclusion of future fees and costs in net payoffs. The first is that many clients feel resentment at having costs and fees used "against" them. And mediators or other settlement proponents may indeed push parties for higher or lower settlement offers when fees and costs increase or decrease the EMV. However, this shouldn't be permitted to compromise the tree's accuracy as a map of the case and its consequences.

It is also true that some lawyers resist providing an estimate of future legal and expert fees and other significant costs of litigation. This is unfortunate. It's simply not sound practice to ignore these costs, as they will be real, and presumably, would impact a client's decision from a business or financial perspective. The decision analyst can observe that while litigation costs should be accounted for if the analysis is to reflect reality, they need not be disclosed to the other side. Even where they influence an internally set "reservation price" for negotiation, they need not dictate initial negotiation offers to be presented



externally. Moreover, if the other side has also counted its own costs and fees, these should similarly affect their receptiveness to reasonable settlement offers or demands.

### **The Rule Against Sunk Costs, in Perpetuity**

A second objection, often raised by clients, pushes in the opposite direction: toward including ALL costs and fees, not just those to be expended between now and resolution of the case. To a plaintiff without a contingency fee arrangement, attorneys' fees and costs are part of the harm; they are consequences of the defendant's unlawful action. They want all attorneys' fees and costs to be part of damages, including those incurred to date. When considering a settlement offer, they measure it against likely damages recovery *plus* attorneys' fee expenditures to date. On the defense side, they would prefer to *reduce* (even an EMV based) settlement offer by their full attorneys' fee quotient to date.

As the experienced lawyer knows, this dynamic—a desire to recoup expenditures—runs deep and is often expressed with or without decision analysis. However, except in cases where attorneys' fees are indeed recoverable, it makes no sense to add past expenditures into settlement demands. These are sunk costs, for both sides. In fact, these expenditures are what made the case ready for the analysis and potential settlement.

One benefit of using a decision tree is the ability to say to a client: “Unfortunately, the rules of decision analysis don’t permit us to include past costs here. It’s just not allowed. We want to make sure our decision tree is clean, accurate, and in accordance with the decision analysis method. We can certainly write them on the chart or in a notation box. They are what enabled our settlement position and bargaining power today.”<sup>7</sup>

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<sup>7</sup> See discussion of using decision tree analysis to communicate with clients in: Aaron, Marjorie, “Finding Settlements with Numbers, Maps, and Trees,” in Moffitt, Michael and Bordone, Robert (eds.), *The Handbook of Dispute Resolution* (2005).

