CHAPTER SEVEN

RISK ANALYSIS

The Role of Litigation Risk Analysis in Alternative Dispute Resolution :

Alternative dispute resolution (ADR), both binding and non-binding, is enjoying tremendous popularity today. Legal conferences and publications are devoting increasing time to discussing the various options and reporting on successful outcomes. Law schools are developing new courses to teach it. This popularity is easily understood when one considers the tremendous financial and human costs involved in the long process of litigation. Less expensive and disruptive alternatives are clearly a welcome sight. However, since commercial mediation is conducted in the shadow of the court, a valuable way of helping the parties to reach a negotiated settlement if to consider the risks that they would face if the case were to proceed to, and through, trial and to evaluate that risk in a quantifiable manner.

ADR and the Need to Evaluate the Risks of Trial.

Non-binding ADR is, at least in part, a means of learning more about the strengths and weaknesses of your case. Depending on its structure, it can offer the chance for the solicitors of both parties and their clients, to hear and test witnesses as well as permitting observation of the reactions of a neutral third party. As such, it can be an excellent and cost-effective means of permitting each side to make a more realistic appraisal of its case.

However, because of its non-binding nature, its results are never a substitute for a trial's results. At its conclusion, solicitor and client still must decide on those terms under which settlement would be preferred to, full litigation. The reactions/opinions of "one" neutral third party (be it one person or one jury) constitute too small a survey from which to conclude exactly how your trial judge will rule. Each side is able to shift its trial strategy and overcome (or at least minimise) the problem areas that surfaced during its non-binding presentation. The lawyer / party representative must be able to evaluate in quantitative terms the risks of proceeding to trial if he is to make the best settlement recommendation following non-binding ADR.

Binding ADR, in contrast, does substitute for trial, but when is it better than trial? Whilst in many instances it may be a far less expensive option, that alone does not make it always better. The legal representative(s) must also conclude that the odds of winning and the magnitude of the award are almost as good as (or better than) at trial. However, because

- **i)** the trial is different,
- **ii)** the amount of information discovered may be far less,
- **iii)** the length of the proceeding may be far shorter, and
- **iv)** the method of presentation may be very different from that used for a trial, this may not be a conclusion easily drawn without a rigorous, quantitative analysis.

Therefore, regardless of whether you are considering non-binding or binding ADR, an important role exists for a Litigation Risk Analysis Decision Tree: If you are contemplating non-binding ADR, how will you appraise the risks of trial and shape the client's settlement position based on what gets learned? If you are contemplating binding ADR, how do you decide whether its risks are preferable to those faced at trial? Only by utilising the Litigation Risk Analysis techniques can ADR be most effectively used.

Before describing the use of Litigation Risk Analysis within the ADR framework of mediation, arbitration, mini trials and the like, it is necessary to point out a conceivable danger of any of these ADR procedures, especially in the commercial context. Is it not possible that their availability may mean that the consequences of legal disputes get shaped by third parties more often than they should be? That is, might the traditional alternative to litigation such as settlement negotiations involving only the adversaries, get

ignored in some situations where it would have proven the best alternative? Settlement might be the fastest and cheapest way of resolving some disputes, and it might offer the parties the best opportunity of devising a creative solution that is more financially attractive to both sides than will be devised by some third party.

Attempting settlement might be pushed to the bottom of the list of ADR procedures as it can often be difficult, especially in the early stages of a case when its cost-savings features would be greatest. Planning your settlement position requires that you try to predict, based on incomplete information, what the judge (and jury in the US) will do with your case. It also requires that you and the client be willing to live with the notion that full discovery (and trial) might have proven that you left too much on the table. ADR may sometimes appear much easier and safer, because a neutral third party tells you what to do. But that does not mean it will always be better.

In the rush to embrace ADR, individuals and corporations should not lose sight of the fact that, just as ADR will often be less expensive and offer more flexibility than trial, a settlement with no neutral third party involvement may often be even less expensive and offer even more flexibility than ADR.

Litigation Risk Analysis can facilitate settlements early on, despite the number of uncertainties that exist at the early stages of litigation, and in ways that even those familiar with decision tree analysis may not have realised. Such an analysis can greatly improve the traditional settlement process[1] and it can also play an important role in other ADR procedures.[2]

Illustration of a litigation risks evaluation using a hypothetical scenario :

Your client, David (hereinafter referred to as D), has been sued for constructive dismissal by Peter (hereinafter referred to as P) because of his age.[3] P, aged 67, and two other managers (aged 63 and 36) were demoted six months ago as part of a series of personnel changes designed to "restore vitality and profits" to D's company, a manufacturing firm which had fallen on hard times. P was reassigned to clerical duties, given a small windowless office, and told to deal only with his replacement and not the executives to whom he had previously reported. Rather than accept these conditions, P quit. Of the other two demoted managers, the younger one also quit, but the older one has "stayed on the job". It is unclear whether or not P was really damaged, since he may have been planning to retire anyway. It is also unclear at this stage whether or not any damages would be awarded by the court. If D loses, he would also be responsible for P's legal fees, though the ultimate amount of these is quite uncertain at this early stage.

Performing a good risk analysis requires three principle steps:

D's representative must first identify the important uncertainties in the case and capture them in the form of decision trees. A decision tree is simply a flow diagram with arrows branching off to either side at each point where more than one possible outcome or course of action arises. (**See Figures 1 and 2 on the following pages.**) The uncertainties may relate to legal or to factual questions, to issues of liability or of damages. They are deemed important if the overall chance of losing, or the magnitude of the financial consequences of losing, depend greatly on their resolution. The shape of a decision tree and the number of branches will reflect the legal questions under any given situation and jurisdiction. The present study discusses a foreign jurisdiction.

For present purposes assume that under the law governing the dispute the outcome would differ :-

i) Depending upon whether the tribunal held that there was an intention to force P to resign.

ii) Even if the tribunal rules that intention is not required in order to establish a valid claim nonetheless the outcome would differ depending upon whether the reason for forcing the resignation was based on the age of P.

iii) If intent is needed in order to found a valid claim the outcome would therefore depend on whether or not such intent is established.

1 See h below

2 See i below

3 This hypothetical study was constructed a number of years ago. The law and social attitudes etc may have changed since then and the attributed percentages may no longer be appropriate.

iv) If intent is established the outcome would also differ depending on whether the reason for forcing P out was based on age.

Also assume that :-

v) Standard retirement age is 70 but employees have a right to continue till 75 and may even work after that if the employer permits them to, health permitting.

vi) Ageism constitutes constructive dismissal up to but not beyond 75.

Figure 1a. Win / Lose Decision Tree from Employer's Perspective

Start

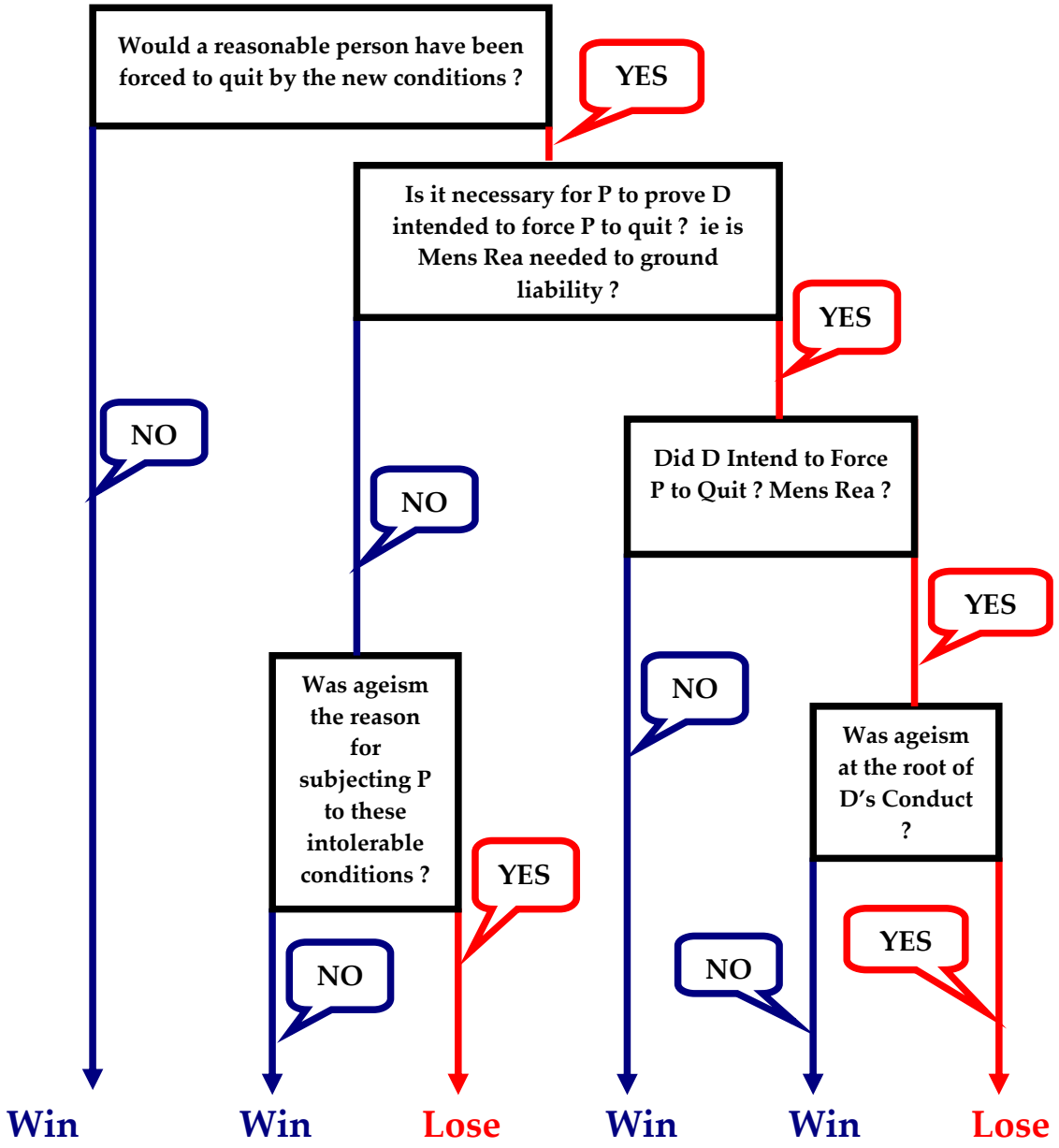


Figure 1b. Win / Lose Decision Tree from Employee's Perspective

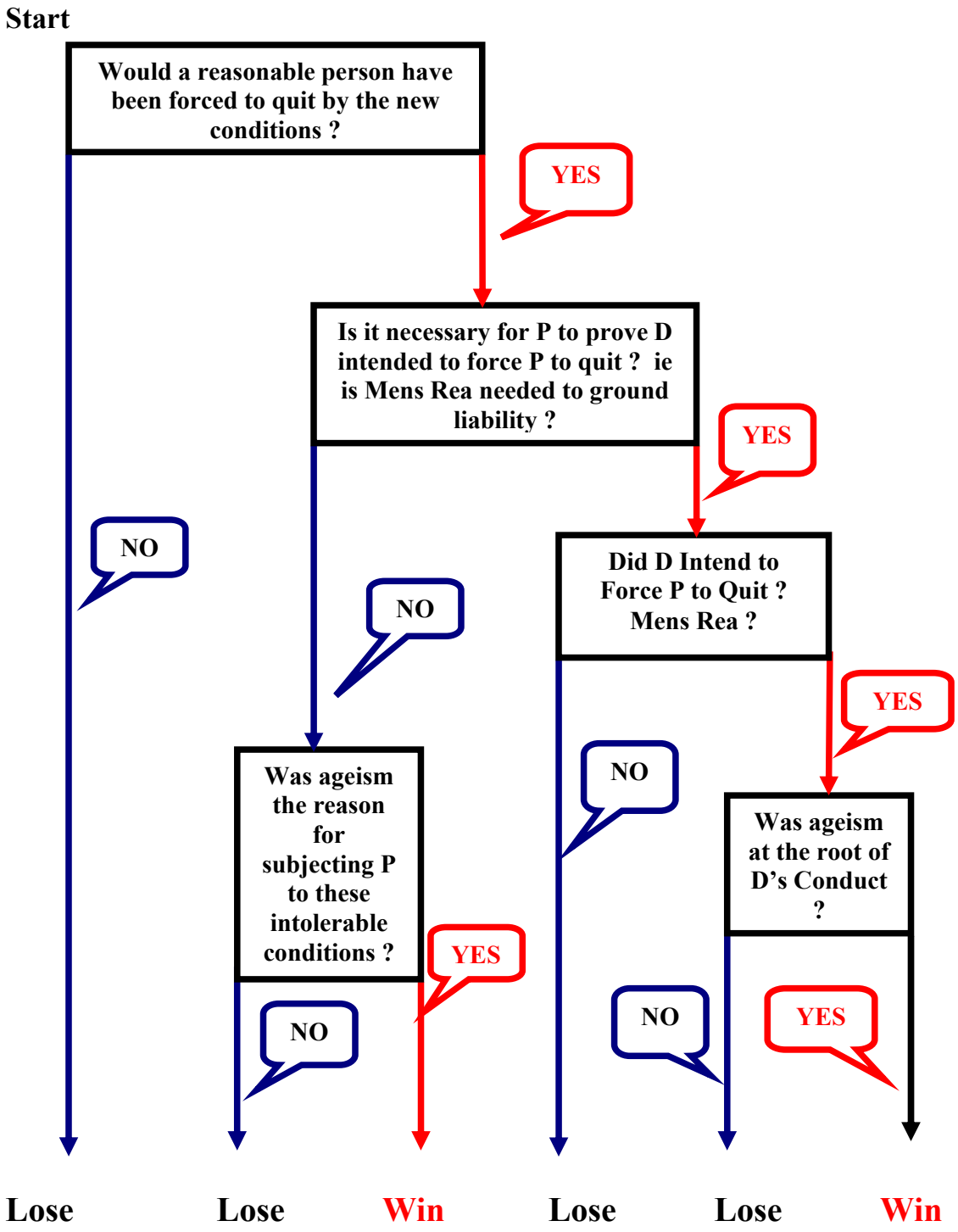
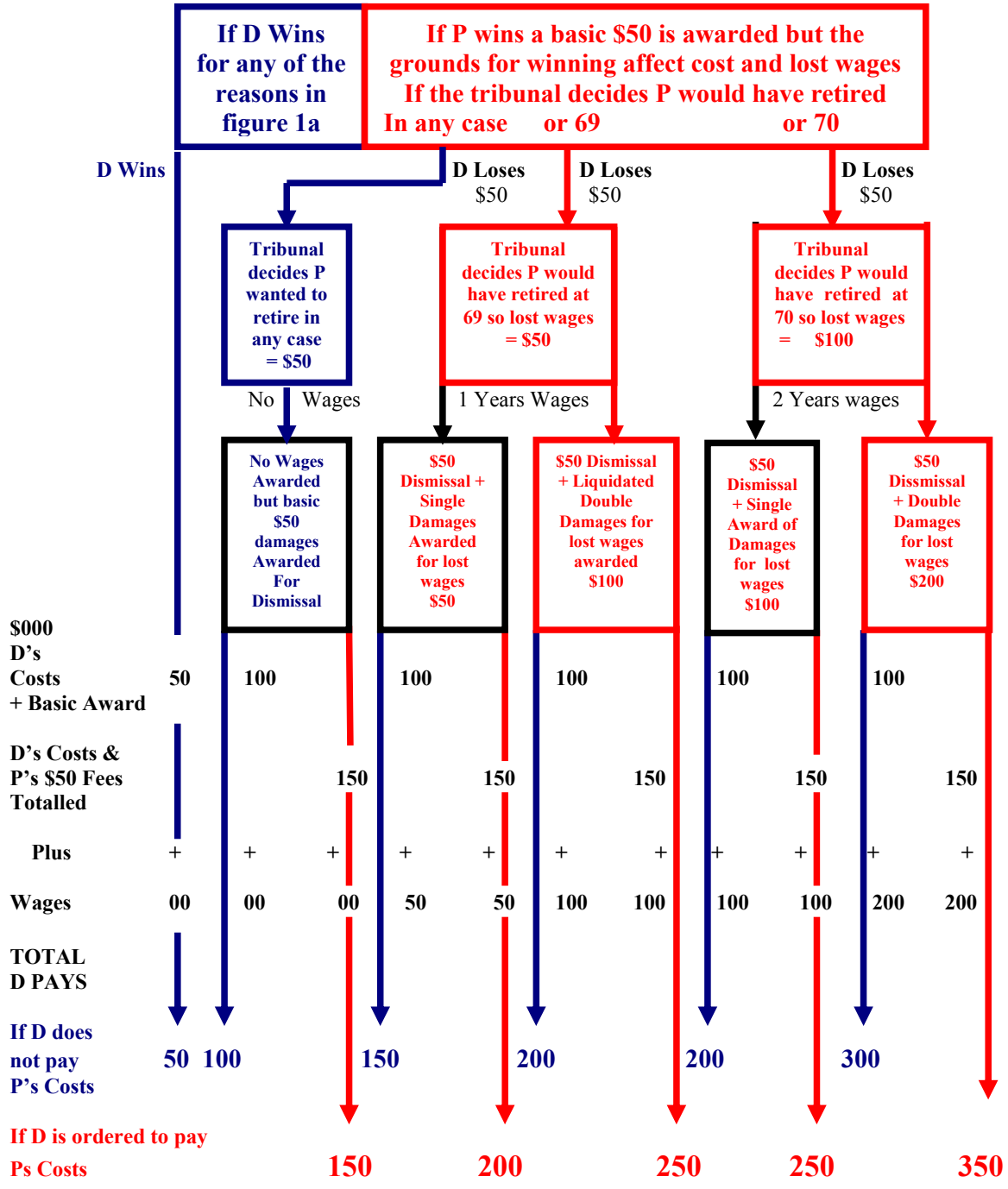


Figure 2. Break Down of the Cost of the Action for D, itemising D & P's costs.
Assuming basic costs for each party amount to $50



P's Costs may not be awarded because a payment in was made or ADR could have settled the dispute.

Variants on this theme could include sexual orientation of an employee or racial discrimination as opposed to ageism. Typically in the UK exemplary or double damages may be awarded following the Treaty of European Union. Causation factors involved include the fact that P might have resigned because he wanted to retire in any case or alternatively he may have been forced out because he was incompetent.

In this case, we see in **Figure 1a** that D's representative believes that the threshold question influencing whether the employer loses the case is whether a tribunal finds the conditions accompanying the demotion were so intolerable that a reasonable person would have quit. If not, it is felt that the Tribunal will be unsympathetic to P and return a verdict for the employer.

If, on the other hand, the Tribunal does find the conditions so intolerable, the employer need not automatically lose. First, the Tribunal might rule as a matter of law that D had to actually intend for P to quit. If this is the ruling from the Tribunal and it finds that D's actions were not taken with the intent of forcing P's resignation, then D will win. Even if such an intent is demonstrated to the Tribunal, the employer will only lose if the Tribunal finds that D's actions had been motivated by the employee's advanced age rather than his poor performance.

Finally, even if the Tribunal rules that intent is not a necessary element of the claim, it must still consider the question of D's motive: did the employer demote P and create the intolerable conditions because of P's age or because of his performance relative to the job's requirements? [4] The magnitude of P's recovery should liability be found is also uncertain. **Figure 2** shows the possible financial outcomes to D, including an estimate of its own fees and other litigation costs.

The shape of a decision tree will vary depending on the rules as to costs. Four variants are possible.

1 Costs may follow the event.
2 Each party may bear their own costs irrespective of the outcome.
3 In a claim and counter claim situation both parties may bear costs for some elements of the claims but not for others, costs being apportioned between the parties.
4 Finally, a protective regime may provide for instance that an employer bear his own costs but also order the employer to bear the employee's costs if the employee wins whilst ensuring that the employee does not have to bear the employer's costs if the employee's claim fails. Such a paternalistic regime could also be applied to consumer claims.

The second step (**Figure 3**) in a good risk analysis is for the legal representative to think of all the reasons why the judge or Tribunal might eventually come out unfavourably on each of the issues shown in the tree.

1 What harmful evidence might the claimant be able to introduce? How sympathetic a witness is the Plaintiff ?
2 How might our witnesses hurt us, or why might they not be believed?
3 What rulings from the Tribunal might adversely affect the outcome of the issue? And so on.

Be sure to record all of the possible reasons. (The decision tree can be a useful place to do this, as illustrated in **Figures 3 and 4 below**.) Now reverse the questions and list all of the reasons, issue by issue, why the judge or Tribunal might eventually find on our side.

Quick Draw Decision Trees : Our illustrations have used boxes and different colours, blue to identify the positive aspects of D's case and red to identify the negative aspects of the case. The principal issues are highlighted in yellow. If you draw a scheme up by hand you can use the line method illustrated below. Use as large a sheet as possible preferably A3. A simple line sketch takes little time to draft : then add key notes to show strengths & weaknesses :-

[4] The uncertainties will not necessarily (or usually) be identified in the same order as they should appear in the decision tree. For example, counsel might first say that whether or not D wins the case "really depends on whether or not the judge rules that intent is necessary in a constructive discharge case." Other techniques called "dependency diagrams" (or "influence diagrams") easily capture uncertainties in whatever order they might be identified, and greatly facilitate the proper construction of the decision trees. They are, however, beyond the scope of this session.

Simple Line Sketch Decision Tree

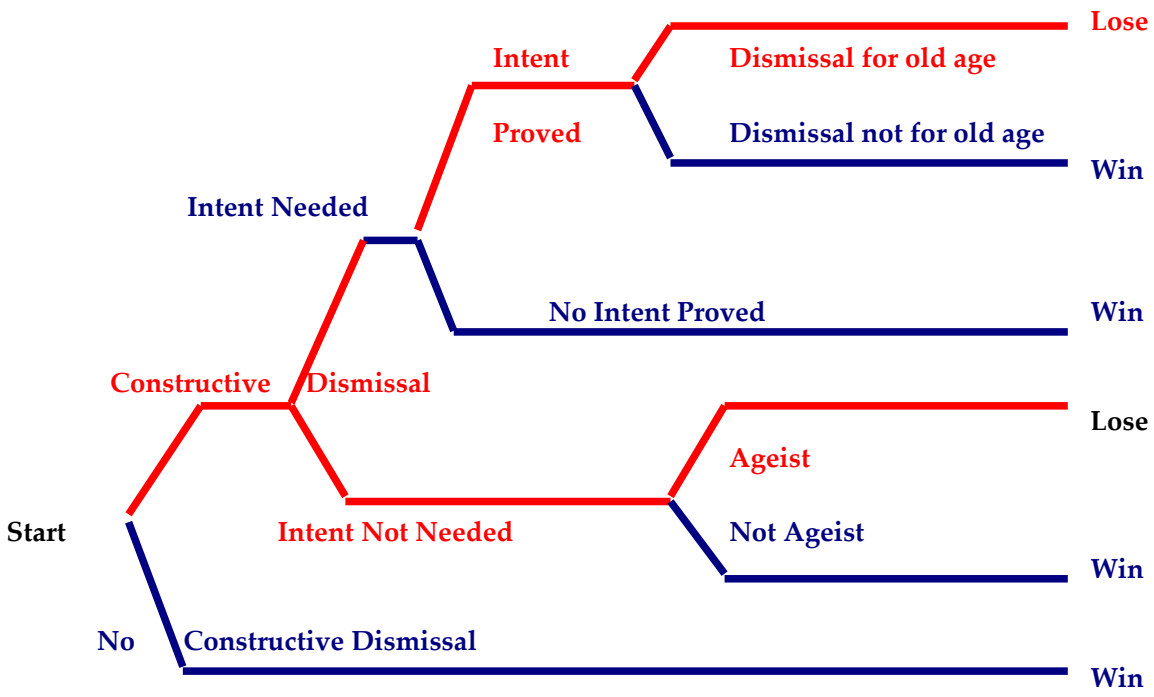
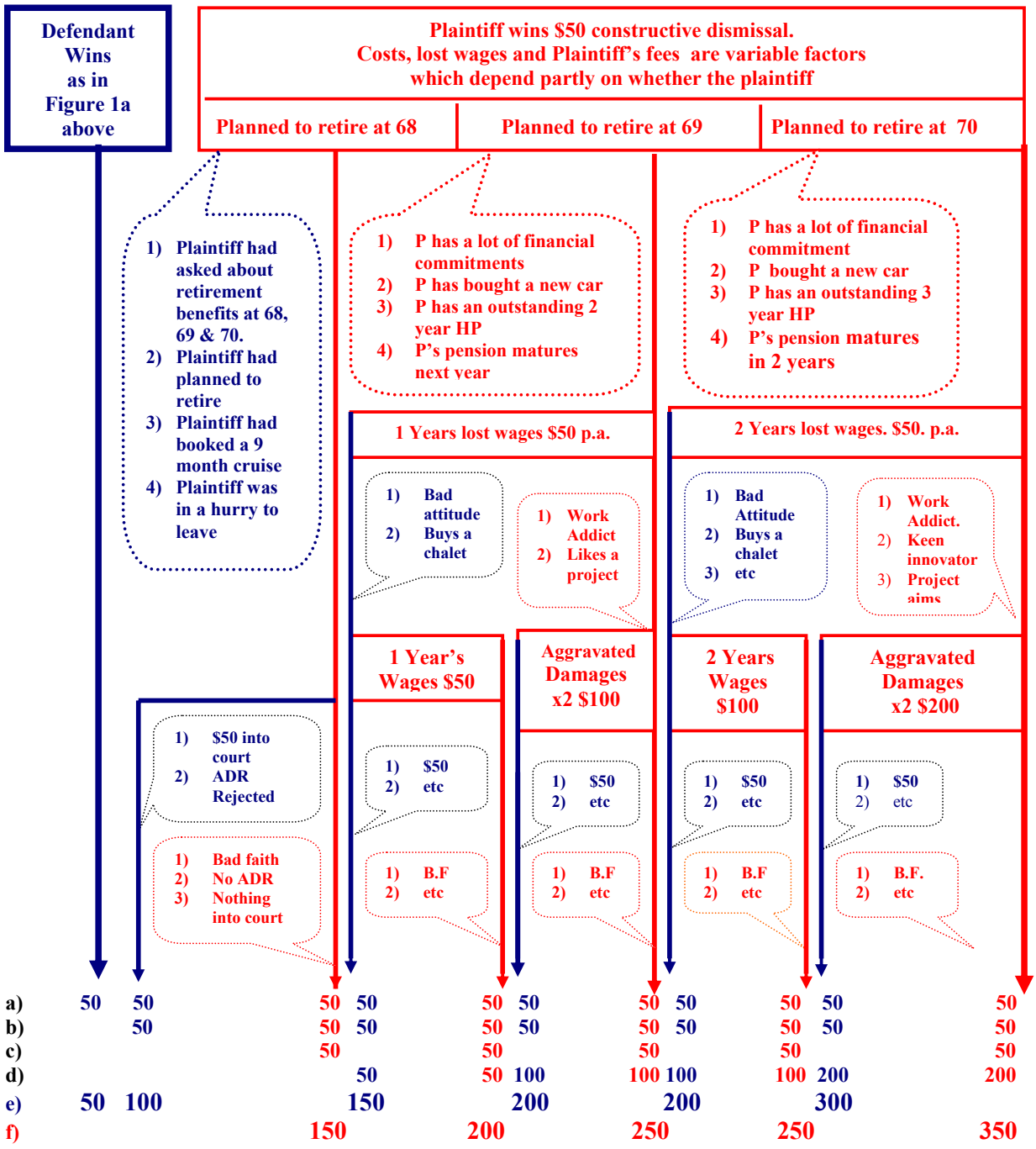


Figure 3. **Win / Lose Decision Tree :**

Strengths and Weaknesses

Figure 4a. Defendant's Costs & Damages relative to Strengths and Weaknesses.

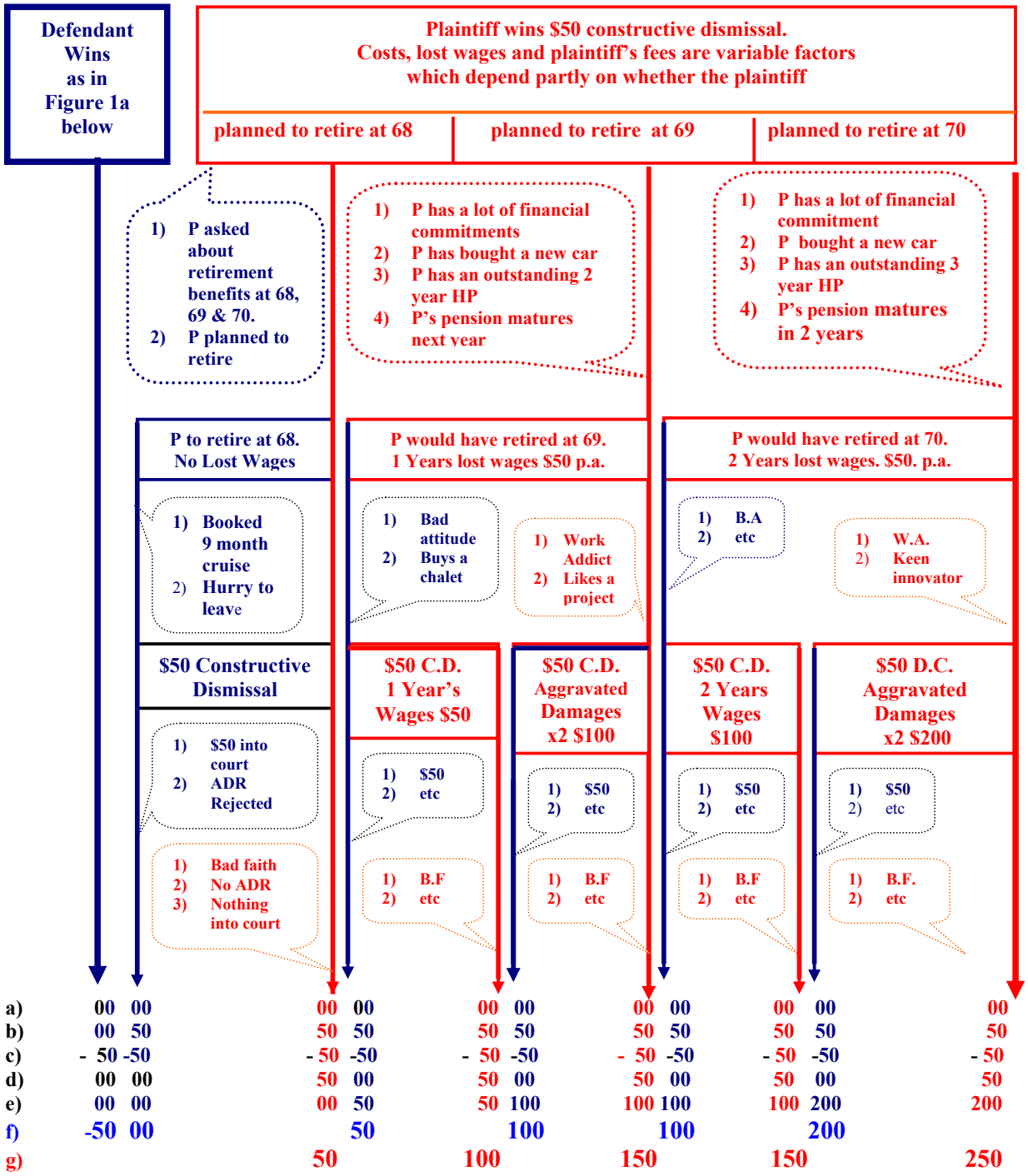
All figures in 000's. Assuming basic costs for each party amount to $50



a) D's costs
b) Constructive Dismissal
c) P's fees
d) Award to P for lost wages
e) D's total payment if no costs awarded against D
f) D's total payment if ordered to pay P's costs.

Figure 4b. Plaintiff's Costs & Damages : Strengths and Weaknesses.

All figures in 000's. Assuming basic costs for each party amount to $50



a)	00	00	00	00	00	00	00	00	00	00	00
b)	00	50	50	50	50	50	50	50	50	50	50
c)	- 50	-50	- 50	-50	- 50	-50	- 50	-50	- 50	-50	- 50
d)	00	00	50	00	50	00	50	00	50	00	50
e)	00	00	00	50	50	100	100	100	100	200	200
f)	-50	00	50		100		100		200		
g)			50		100		150		150		250

a) Defendant's costs are not recoverable against a Plaintiff so all figures 00 :
b) Damages received by Plaintiff for Constructive Dismissal :
c) Plaintiff's fees (preceded by a debit and not recoverable if Defendant wins:
d) Plaintiff's fees recoverable from Defendant if Plaintiff wins:
e) Award to Plaintiff for lost wages :
f) Plaintiff's gains, less outlay, if no costs awarded against Defendant :
g) Plaintiff's gains, less outlay, if costs awarded against Defendant.

If there are several lawyers involved in the case, they should go through this process together, not individually. Experience has shown that the lists are always more complete and do a better job of anticipating the results of future discovery when developed in this manner. (This suggests that even if the case is in the hands of a single solicitor, it would be well-worth outlining the issues briefly to a colleague and then asking for their thoughts on what might influence the court to come out one way or the other.)
The third important step is for the solicitor to evaluate each of these uncertainties, quantitatively, in terms of probabilities. As has been discussed elsewhere, quantitative evaluations have a number of advantages over qualitative ones.[5]

Two advantages of quantitative evaluations over qualitative evaluations are especially important for this discussion.

(i) The use of phrases such as "good chance" or "some possibility" usually means that the solicitor has not thought as hard as possible about the uncertainty.

That is, the fuzziness of such phrases may reflect the fuzziness of the lawyer's thinking on the underlying issue. Being forced to think whether "good chance' is more like even odds (50%) or three-to-one odds (75%), or something else, almost always clarifies the solicitor's own views on the issues.

(ii) Even if two solicitors arrived at the same qualitative evaluation of each of the uncertainties in the decision tree, it is unlikely that in combining all of their separate evaluations, they would arrive at the same overall chance of winning the case. This should be clear by looking at **Figure 5 below** What conclusion would you reach on the overall chance of the employer winning? And can you imagine someone else reaching a different conclusion (maybe even a **very** different one), even though they had used exactly the same words on each of the branches of the tree? A good valuation process is one that always produces the same overall result when two people are in agreement on each of the underlying components. Obviously then, qualitative expressions of uncertainty cannot be used.

Only by using probabilities can we be confident of a good valuation: first, multiply the probabilities along any one path to get the probability of that combination of events; then add up all the winning scenarios, as well as all the losing ones. See **Figure 6 below.** Then transfer the probabilities of winning and losing to **Figure 7** [6] **below** and repeat the process of multiplying probabilities along each path.

[5] Victor, The Proper Use of Decision Analysis to Assist Litigation Strategy, 40 Business Lawyer 617 (1984)

[6] See also Victor, How Much Is A Case Worth?, Vol.20 No.7 Trial 48 (July 1984), for a description of this process. Note that if the damages depended not simply on whether D won or lost but on how D won or lost, we would need one large decision tree with all of the issues linked together, rather than the two separate trees.

Figure 5.

Win / Lose Decision Tree

Qualitative Analysis from Employer's Perspective

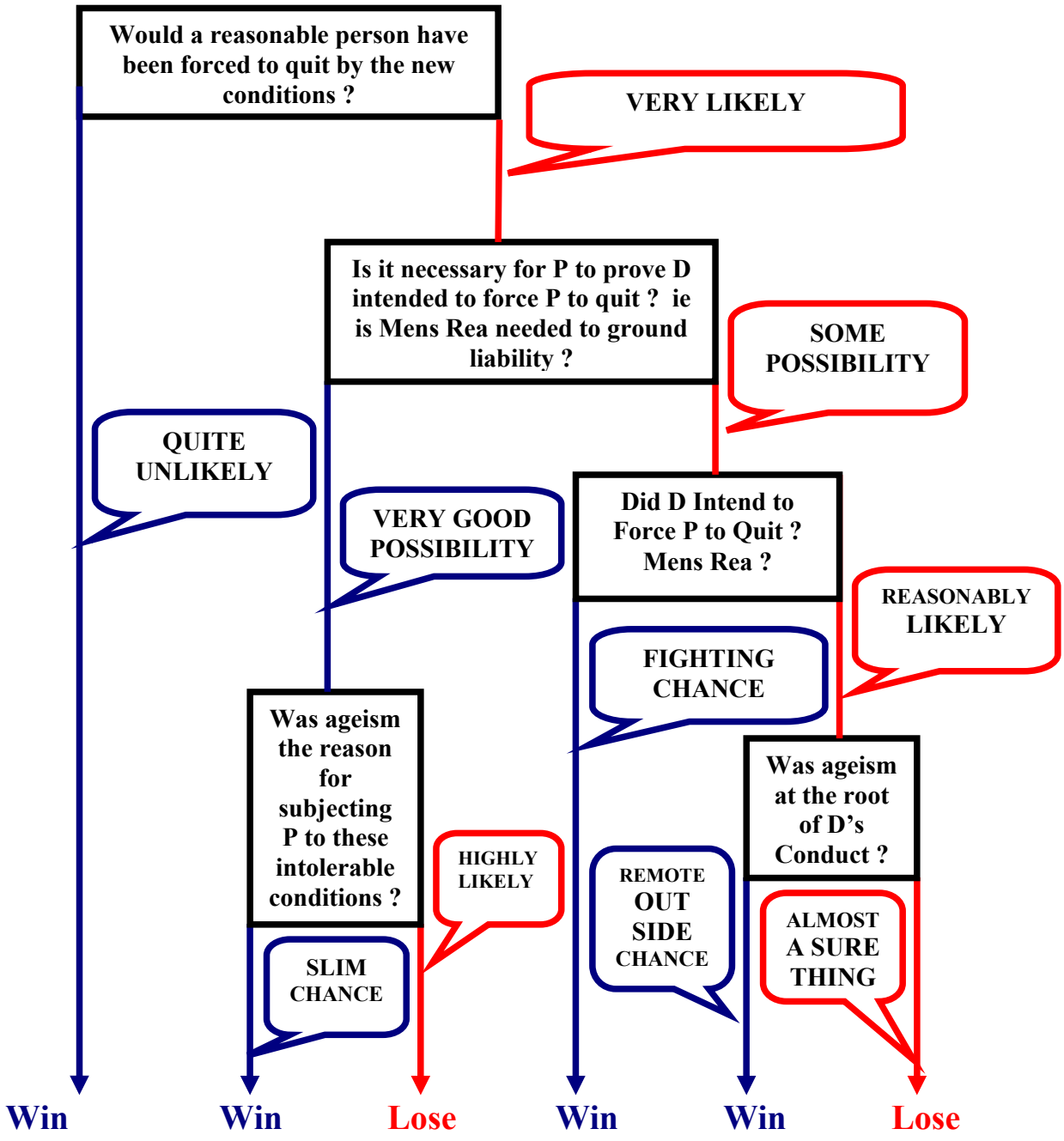


Figure 6.

Win / Lose Decision Tree :

Probabilities from Employer's Perspective

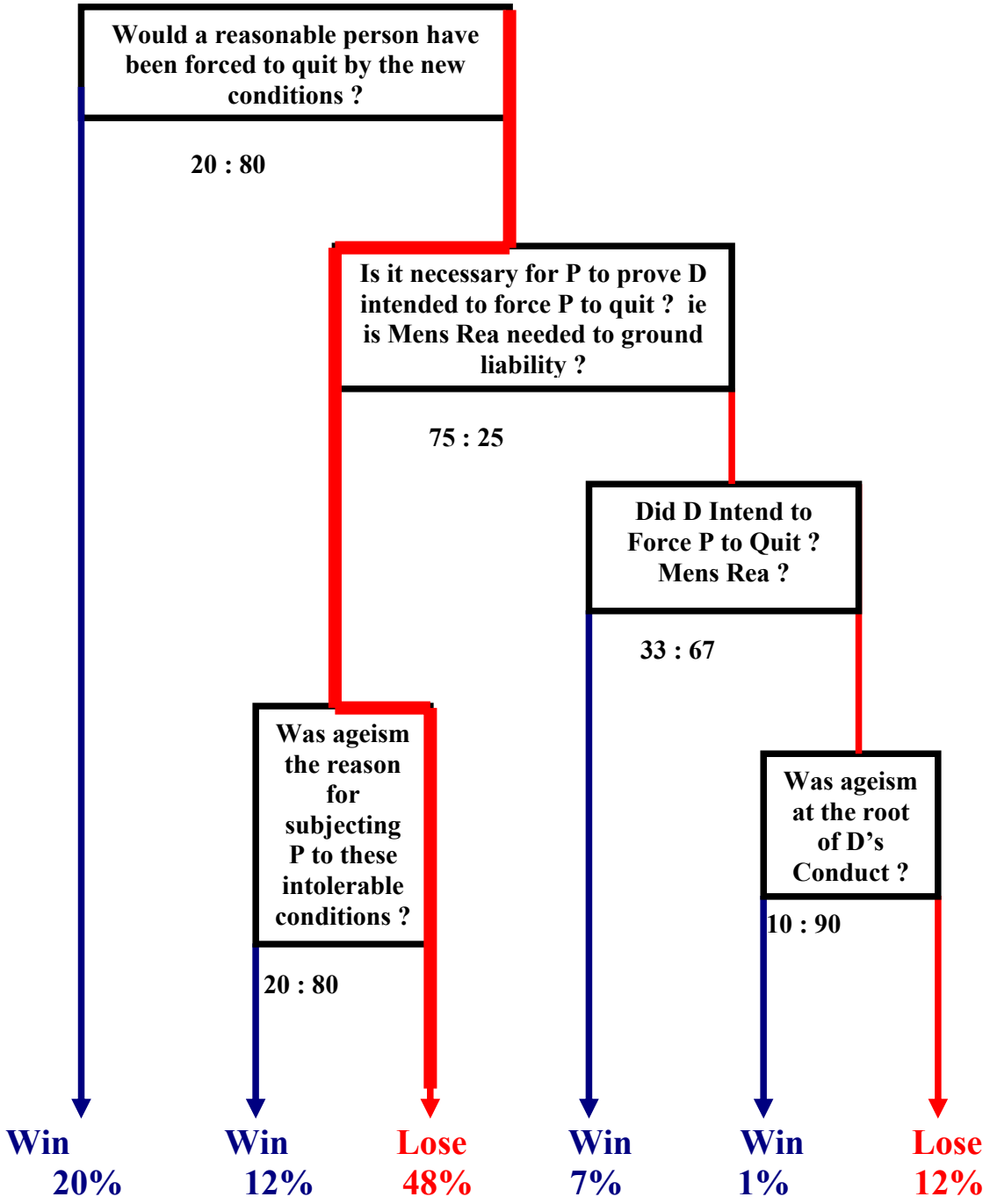
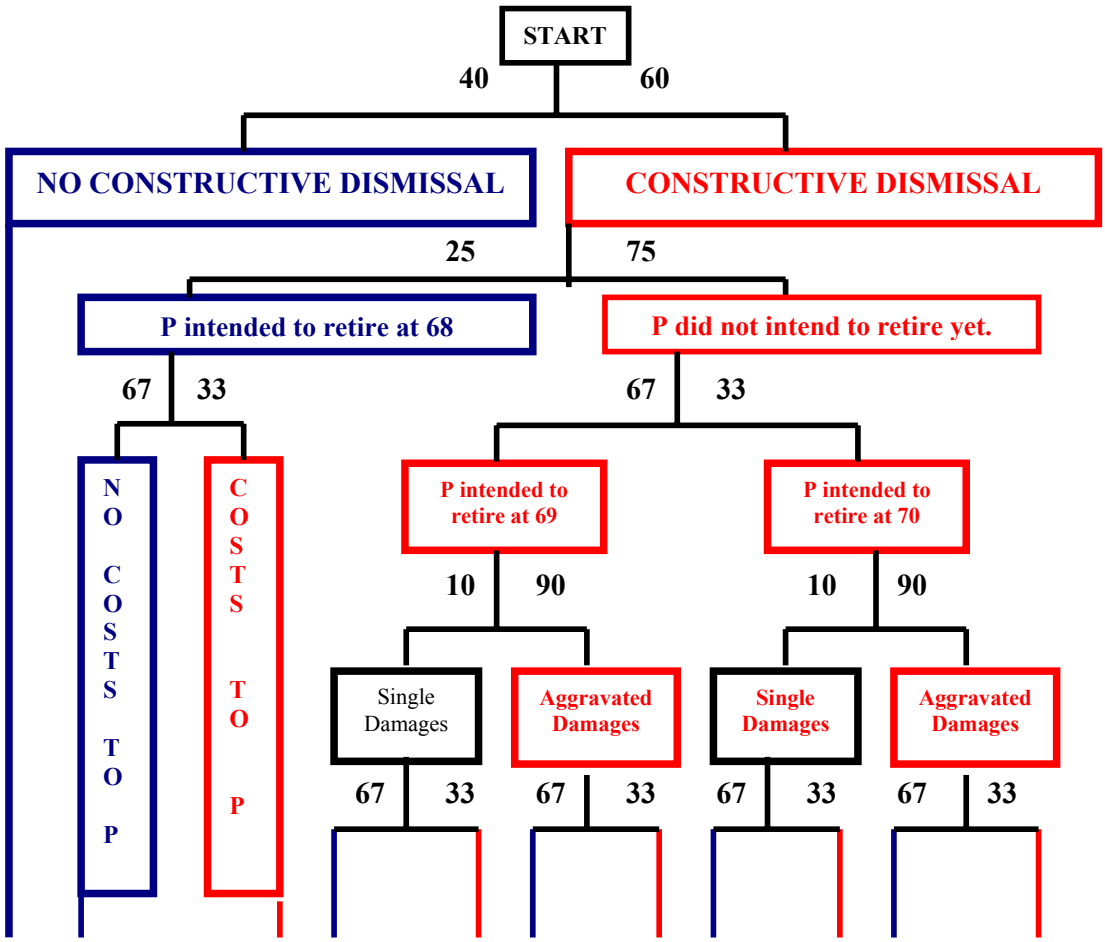


Figure 7. **Payout Probabilities for Defendant**

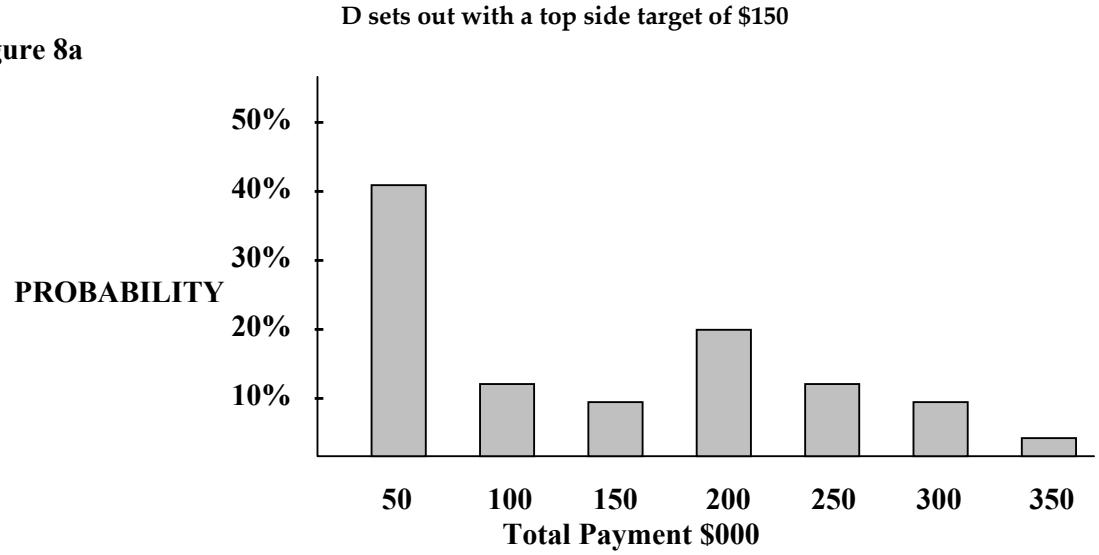
In respect of Defendant's and Plaintiff's Costs plus award.



a) **D's costs :**
b) **Constructive Dismissal :**
a) **P's fees :**
b) **Award to P for lost wages :**
c) **D's total payment if no costs awarded against D :**
d) **D's total payment if ordered to pay P's costs.**

To conclude the Litigation Risk Analysis, the solicitor has only to summarise all of the scenarios in some form of probability distribution such as the bar chart shown in **Figure 8**.[7] This is easily done with the information in the last two columns of **Figure 7**. Depending on the client's attitude toward risk-taking, a single lump sum figure can now be assigned by the client to a resolution by litigation.[8]

Figure 8a



At the outset of the dispute the client had set an upper limit of $150.

On seeing the possibilities of paying between $250 – 350 a nervous client may consider hedging his bets by upping that limit to $200.

With odds of 40:60 litigation would require Dave to be a determined defendant.

[7] Note that the analysis is dated. As the case progresses, new information will be learned. This will result in changes to the probabilities (and possibly the decision trees themselves). This does not mean that the earlier analysis was in any way wrong. It simply means that evaluations are a function of information. But since information is costly to obtain -both because discovery and legal research are expensive, and because early offers to resolve a dispute may in fact be favourable and may be removed if not accepted now -- we had better try to evaluate the case even when lots of uncertainty exists. (The risk analysis can then be used to help identify those instances in which we would actually be better off continuing with discovery and getting more information rather than resolving the dispute early. See h (2) below.

[8] The client who is not risk averse would be willing to pay up to the probability weighted average value: (40% x *$50)* + (10% x $100) + ... + (9% x $300) + (4.5% x *$350)* $147,000. This is known as the "Expected Value." A risk averse client, however, might well look at Figure 8 and decide it was willing to pay up to $200,000 to protect against the nearly *25%* chance of losing $250,000 or more in litigation. See also Victor, supra note 3. (Other consequences of litigating or settling, in particular the effect on other pending or potential litigation, can also be quantified and combined with the client's valuation of the immediate action.)

The probability weighted average or "Expected Value"

Figure 8b. This is represented by the sum of the percentage value of each probability

$50	x	40%	=	$20.
$100	x	10%	=	$10.
$150	x	7%	=	$10.5
$200	x	20%	=	$40.
$250	x	9.5%	=	$23.75
$300	x	9%	=	$27.
£350	x	4.5%	=	$15.75
TOTAL		**100%**	**=**	**$147.**

In the circumstances the lawyer's estimated odds coincide with the client's initial upper limit. If D's lawyer were to engage in early discussions for a possible settlement, provided Peter's lawyer had conducted a similar exercise there would be a strong likelihood of achieving a settlement.

We will see later that by transferring this dispute to ADR a much lower settlement rate could be achieved simply by removing a large part of the litigation costs. In real terms P would be no worse off, but D could make a substantial saving. The benefit to P is represented by the removal of the vicissitudes of litigation ie the possibility that he might lose or receive a lower award which is swallowed up by litigation costs.

An analysis such as this may be carried out several times as negotiations progress. New variants may be introduced. Estimates may be revised in the light of new evidence as it comes to light. The reality of litigation costs grows significantly as the trial date approaches, increasing the possibility of either side being more amenable to an offer.

A client representative can make good use of these techniques during the course of a mediation. The mediator is likely to do the same. When the mediator and the client representative reach the same conclusions about the costs and risks of abandoning the mediation in favour of a trial the possibility of reaching a closure is considerably enhanced. There are times however when the figures will convince a client that the risks at trial are so low that unless a favourable offer is made by the other side there is no need to compromise and a trial is the best way of moving forward.

Risk Analysis Improves the Traditional Settlement Process [9]

There are many ways in which settlement can benefit from a Litigation Risk Analysis:

1. If the solicitor feels overwhelmed by the number of uncertainties presented by a lawsuit, which is especially likely when most of discovery remains unfinished, the solicitor's natural tendency is to resist thinking hard about a reasonable settlement, thereby dooming the possibility of an early, cost-saving, resolution. Experience has shown, however, that the decision tree gives solicitors a means of sorting out and organising uncertainties in a case, regardless of the number.

   Experience also demonstrates that the legal representative knows quite a lot before any formal discovery begins. This is based on the "record" of documents, memos, notes of conversations, etc., which has built up prior to the dispute becoming a lawsuit. An experienced solicitor is good (or should be good) at anticipating many of the things that will surface from formal discovery. Finally, it has been shown that once the reasons for possibly winning or losing on each of the issues shown in the tree have been articulated and actually recorded on the tree, the solicitor is far more comfortable assessing the odds (and in quantitative terms) than would have been imagined. Thus, in many cases, the exercise of performing the decision tree analysis allows the settlement process to get off the ground, where without it, the solicitor might postpone even thinking about settlement for quite some time.

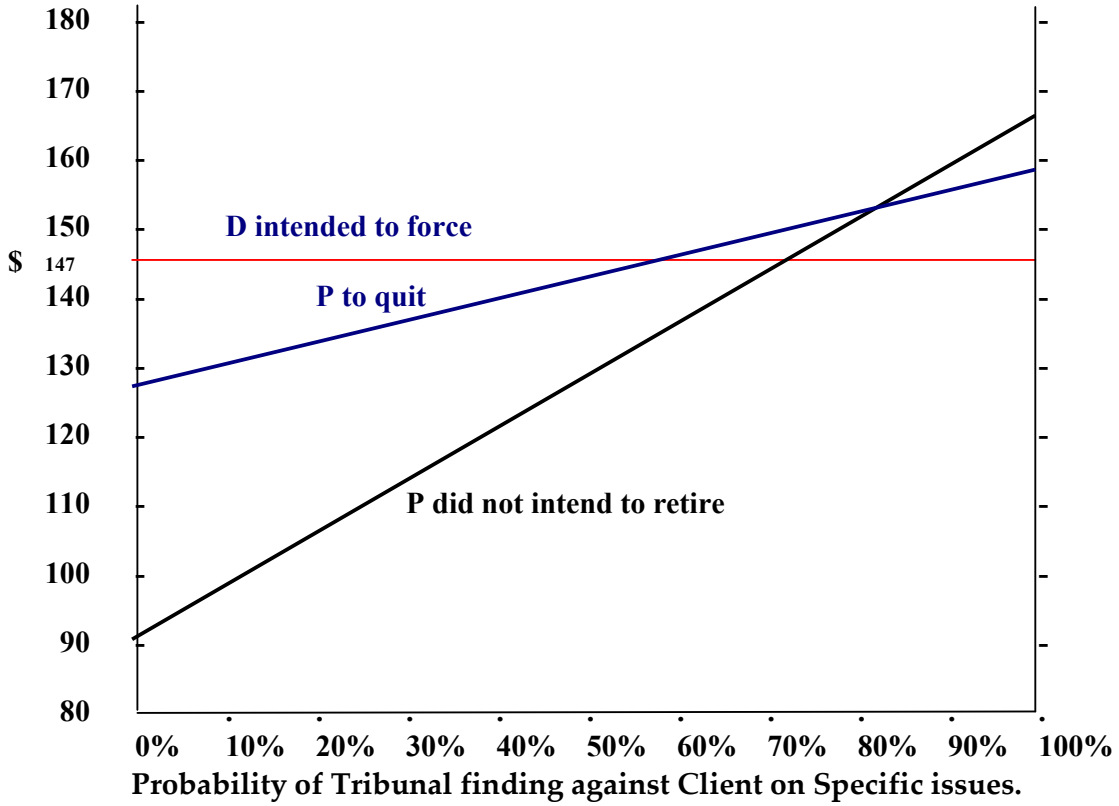
2 Having made initial assessments of the various uncertainties in a tree, a client representative can identify those issues where having more information would be critical to determining the client's settlement. The process is called a "sensitivity analysis" and is accomplished by varying the probabilities of a particular outcome and recalculating the client's settlement value as described at the end of Section g. **Figure 9** shows the results of two sensitivity analyses.[10]

   If you thought the claimant was likely to be willing to settle for under below your client's top side figure, you could comfortably begin negotiations, **despite** your uncertainty about these two issues. The money saved by not doing additional discovery into these uncertainties (and the fact that discovery might uncover bad evidence as well as good) could convince the parties that a settlement in that range was an attractive proposition.

[9] While this section and the next reflect the experiences of many attorneys who have been through Litigation Risk seminars, we are particularly grateful to five for sharing their comments and experiences: Bill Jones (General Solicitor, AT&T), Jay Lapin (Wilmer, Cutler & Pickering), Stuart Parsons (Quarles & Brady), Tom Stanton (Reinhart, Boerner, Van Deuren, Norris & Rieselbach, and former General Counsel, Kimberly-Clark Corporation), and Dick Von Waid (General Counsel, Manville Corporation).

[10] These graphs are easily constructed for the "risk-neutral" client who makes decisions based on Expected Values. For example, the $128,000 value at a 0% probability of "the jury finds intent" is arrived at by substituting 0% for 67% in Figure 6, recalculating the overall chance of D winning (52% v.40%), and recalculating the probability-weighted average by revising Figure 7 and performing the arithmetic described supra note 6. See also Victor, supra note 3, at 627. When necessary, joint sensitivity analysis showing the combined impact of varying two or more probabilities simultaneously can also be easily performed and graphed.

Figure 9. Graph reflecting the sensitivity of the Expected Value to specific issues.



Graph indicates the impact of varying the probabilities of i) the tribunal ruling that D intended to force P out and ii) the tribunal ruling that P had no intention of retiring on the Expected Value. Each line commences at 100 : 00 – the expected value being achieved by recalculating Figure 8b. Where the two lines cross provides a new figure that takes into account the high sensitivity of these two factors.

3 Even if the legal representative feels comfortable thinking about settlement without performing a decision tree analysis, he or she will usually feel much more confident in the quality of his or her recommendations once he or she undertakes a Litigation Risk Analysis. This stems from the fact that the risk analysis:

(a) makes most client representatives think harder about what issues the trial will find important, more clearly about how these issues are interrelated, and more realistically about the odds of prevailing on each issue; and

(b) then allows counsel to use logic (rather than sloppy guesswork, see the earlier discussion of **Figure 5**) to combine the many subjective judgements required by the case, and to correctly explore the consequences of making alternative assumptions.

4. Usually there are many players that make up "our side", several legal representatives, the client's people involved in the problem before it became a lawsuit, and the executive or group of executives, if any, who make the ultimate case strategy decisions. It should not therefore be surprising that "our side" will often have difficulty reaching agreement on the cash value to be placed on litigating if they lack a way of clearly illustrating and rationally supporting any valuation.

This is especially true early in a case when complexity, uncertainty, disorganisation and confusion, may be at their greatest. As a consequence, "our side" may not have the confidence to enter into settlement talks (or any other dispute resolution process). This lack of confidence on the part of either

the team of legal representatives or the client is one of the major stumbling blocks to early, non-litigated, resolutions. It is easily removed, however, by creating the clear, comprehensive picture of our case that follows from a risk analysis and that demonstrates to our co-lawyers and our client a well-reasoned recommendation. This is especially helpful when client emotions are running high and clouding their ability to evaluate the case rationally. One look at the decision tree should help to get the client in the right frame of mind -focused on the merits of the case rather than on their emotions.

5. If the Litigation Risk Analysis produces the kind of clear analysis that allows our side to understand the issues and the risks posed by proceeding to trial, then it should be effective in persuasively explaining our view of the case to the other side. Many solicitors acknowledge their success in using the decision trees to educate their opponents and quickly settle their lawsuits.[11]

6. The use of decision trees and probabilities should create an environment conducive to dispute resolution. A decision tree quickly informs the other side you recognise not all scenarios in the case conclude in your victory and their defeat. Similarly, probabilities **(which most lawyers are loathe to set above 90%)** show recognition that there are no certainties in litigation, but instead that litigation does contain risks and uncertainties. In addition, the techniques convey, to the other side that you are being as serious and rigorous as possible in evaluating the risks of litigation. In the United States, attorneys who have shared these analyses with the other side have found an increased attentiveness on the part of their opponents.

   Using the tree negotiations are less likely to come to a standstill where a party demands far more than is offered. Instead, the nature of a good decision tree analysis forces discussion to the level of individual issues, influencing factors, and probabilities, rather than the overall value of the case. Client representatives may find many issues on which they are in close agreement, and only a few on which they really differ. At that point, they may be surprised to find that if they each use probabilities and each perform the simple arithmetic discussed earlier,[12] the values they arrive at are not far apart. Remember how easy it is to disagree on the **overall** chance of winning if issues are described only qualitatively (see **Figure 5**). Many apparent disputes over settlement values are just that, ie apparent, not real. However, traditional methods of evaluation are insufficient to disclose that. Discussing the merits issue by issue, in numerical probabilities, will help to define real differences and thus disclose true settlement potential.[13]

7. By creating decision trees and especially the lists of reasons why each of the issues could be resolved favourably or unfavourably, we have created the ideal tool to best educate ourselves. The more explicit we have been in our analysis, the easier it is for our adversary to identify important omissions in our thinking. This, in turn, may save us from some very costly mistakes -- for example, turning down a settlement we erroneously believe is too high, only to find out after costly discovery (or far worse, after losing at trial) that we had overlooked a few weaknesses in our case. At the same time, by having been explicit in our analysis, we also reduce the chances of being "oversold" by our adversary; that is, overreacting to new information they confront us with. Psychologists have repeatedly found that such overreacting is a common experience. The lists developed in **Step 2** of the risk analysis should prevent solicitors from placing too much weight on the new information, because they force legal representatives to recall the **full** set of reasons that were identified on each side of the issue.

[11] It is not suggested that you necessarily disclose everything to your opponent. As in all settlement negotiations, premature disclosure of arguments the other side might not have thought of could weaken your position. But if you really want to settle and feel that your opponent is likely to perceive the critical issues on its own in a timely fashion, there should be little risk in discussing your analysis in detail. If you are nonetheless concerned, you might try what one corporate counsel has found successful in some situations: Give your adversary a decision tree showing the obvious liability and damages issues, ask him to fill in his own probabilities (without disclosing yours), and solve for the Expected Value. It may turn out to be just a fraction of what he had been demanding! (Some analysis on your part ahead of time should help to identify those situations where this is most likely to be true.)

[12] See supra foot note 8

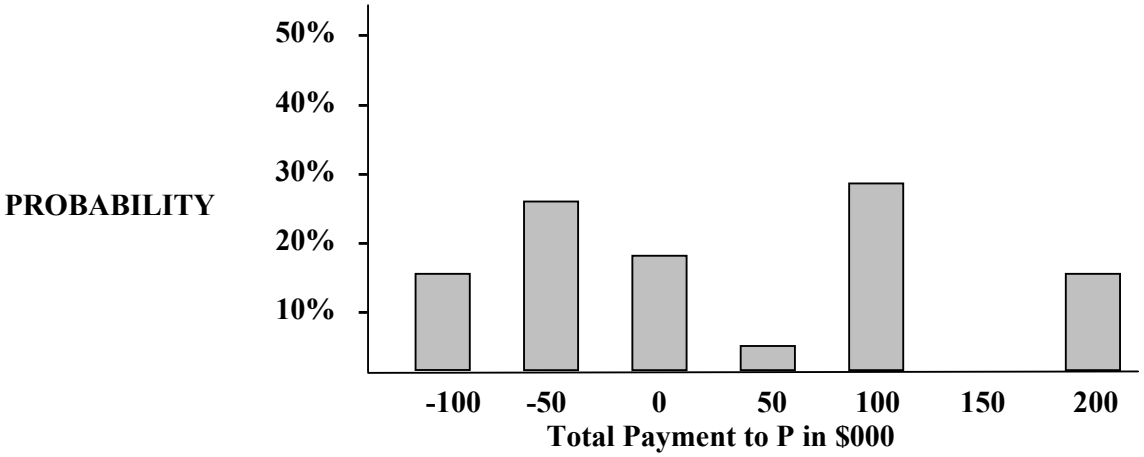
[13] Tversky and Kahneman Judgment Under Uncertainty: Heuristics and Biases, 185 Science 1124 (September, 1974).

8. By performing the risk analysis and the sensitivity analyses described in **h.2**. above, we should give ourselves a real bargaining advantage in settlement talks over a less well-prepared adversary. Remember that these "sensitivity analyses" tell us which issues have the biggest impact on case value and on which, therefore, it is most important for us to convince the other side of our judgement. Therefore, we can be generous in conceding a little on one point to our adversary if this helps us to do better on another point which analysis demonstrates to be of more intrinsic value in the case!

9. We may also derive a bargaining advantage by repeating our original analysis from our opponent's perspective before our first negotiating session. (See **Figure 11**.) This will usually help us to understand better how legal fees (ours and theirs) impact on each side's evaluation of the litigation alternative. This information helps to create a graph of the claimant's overall probability distribution (**Figure 10**), and by thinking about how risk averse he may be, should also produce insights that can help us arrive at a more favourable resolution of the dispute.[14]

10. Finally, for many of the reasons discussed above, a Litigation Risk Analysis has proven a most effective means of educating the other side.

Figure 10 **P's minimum settlement figure is $30**



[14] Figures 10 and 11 are appropriate for a case which is not being handled on a contingent fee basis. If plaintiff were paying his counsel a contingent fee, it would be most insightful for defence counsel to prepare two sets of figures -- one showing the plaintiffs risks and potential recoveries, and one showing his attorney's.

Figure 11a **Gain and Loss Probabilities for P. Worst Case Scenario**

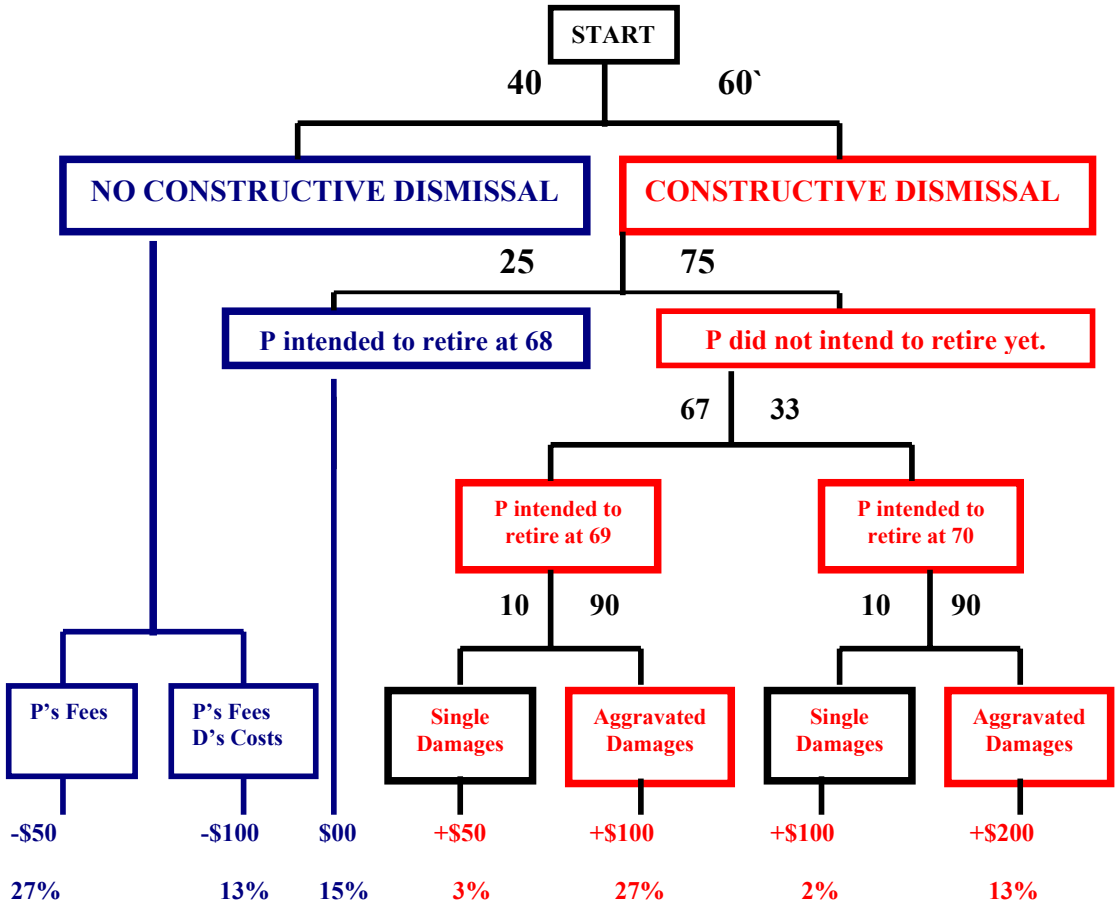


Figure 11b.

The probability weighted average or "Expected Gain or Loss"

This is represented by the sum of the percentage value of each probability

-$50	x	27%	=	-$13.50
-$100	x	13%	=	-$13.00
$000	x	15%	=	$00.00
+$50	x	3%	=	+$1.50
+$100	x	27%	=	+$27.00
+$100	x	2%	=	+$2.00
+$200	x	13%	=	+$26.00
TOTAL		**100%**	**=**	**$30.00**

Risk Analysis and ADR

The above discussion has outlined numerous reasons why conducting a Litigation Risk Analysis should put solicitors in a much better position to settle a case easily, perhaps at an earlier point in the litigation, and maybe on more favourable terms. But even if settlement is not possible and ADR is being considered, having first performed a risk analysis is of tremendous value.

1. If the two sides used the issue-by-issue, probability-by- probability focus of the decision tree in their unsuccessful settlement negotiations, it may now be possible to limit greatly the scope of the ADR. That is, face-to-face negotiations might at least have produced agreement on the issues belonging in the tree and the probabilities of many of them. ADR could then be limited to just those issues for which probabilities were substantially different and for which the differences caused a significant difference in Expected Values. This would reduce the costs of ADR.

2. Many forms of ADR are highly compressed as compared to trial. With limits on the total amount of time available (both before and during the process) and the number of witnesses and types of evidence that can be presented, there is an enormous premium on identifying those few issues and arguments that should be stressed. Sensitivity analyses are the most reasoned way making such determinations.

3 In non-binding ADR there is the danger that the tendency to overreact to the latest information (as noted in h7) will cause legal representatives to give too much weight (in rethinking the value of the case) to the results reached by the neutral third party. Given all of the potential advantages of non-binding ADR, it is wise to be cognisant of this one danger so you can protect against it. The best way to do so is to have conducted a thorough risk analysis ahead of time and to have thought about just how surprised you would really be by various results of the ADR. In doing so, remember that statisticians, "jury scientists," and others who try to predict the outcome of some event based on the results of a survey give very little weight to a single observation.

4. As discussed above, non-binding ADR may be a cost-effective way of getting more information about the strengths and weaknesses of your case. This information should then be used by the solicitor and client to better assess the risks of litigation and to arrive at a reasonable settlement position. If a decision tree analysis was performed prior to the non-binding ADR, it will require little effort to revise the analysis to reflect what has been learned through the ADR.

5. Where binding ADR such as Arbitration is being contemplated, many of the problems that keep early settlements from happening may keep the legal representative and/or the client from deciding to commit to binding ADR, especially at an early enough stage to have a significant cost-savings potential. These problems of analysing numerous uncertainties and presenting a convincing recommendation to our client were discussed above. In the same way that the exercise of performing the risk analysis, and the diagrams that are the results of the analysis, permit "our side" to formulate a settlement strategy, a similar risk analysis of the ADR can be performed to facilitate agreement on whether it is preferred to litigation. This entails reassessing all of the probabilities and dollar amounts in **Figures 6 and 7** to reflect the different trial, information, length and nature of the presentations, and costs inherent in the ADR proceeding as compared to a trial after full discovery.

   Are the overall risks of arbitrating more or less desirable than those of litigation? **Figures 12 and 13** show the revised probabilities and costs. A calculation of the Expected Value of Arbitration produces $100,000 as compared to the Expected Value of Litigation of $147,000. The decision to commit to the arbitration is now an easy one to make as a result of having performed the risk analyses.

The principal benefits of resorting to arbitration are related to speed of settlement and lower legal representation and trial costs. In the US a major uncertainty about trial is that the jury system produces very unpredictable results. Whilst this is not an issue in the UK nonetheless settlement rates are likely to more closely resemble the needs of industry since the arbitrator is normally an industry expert and not being a lawyer / judge is less likely to adhere to the settlement guidelines that govern the judiciary. The industry reality is reflected in the higher probabilities in favour of the employer in Figure 12 below. Whilst the cost advantage of arbitration has been questionable in recent times, now that the Arbitration Act 1996 is starting to produce visible results, supported by the courts under the Civil Procedure Rules 1998, this cost advantage of arbitration over litigation is once more becoming evident. The cost benefits to both parties are reflected in Figure 13

Figure 12.

Win / Lose Decision Tree : Arbitration Probabilities from Employer's Perspective

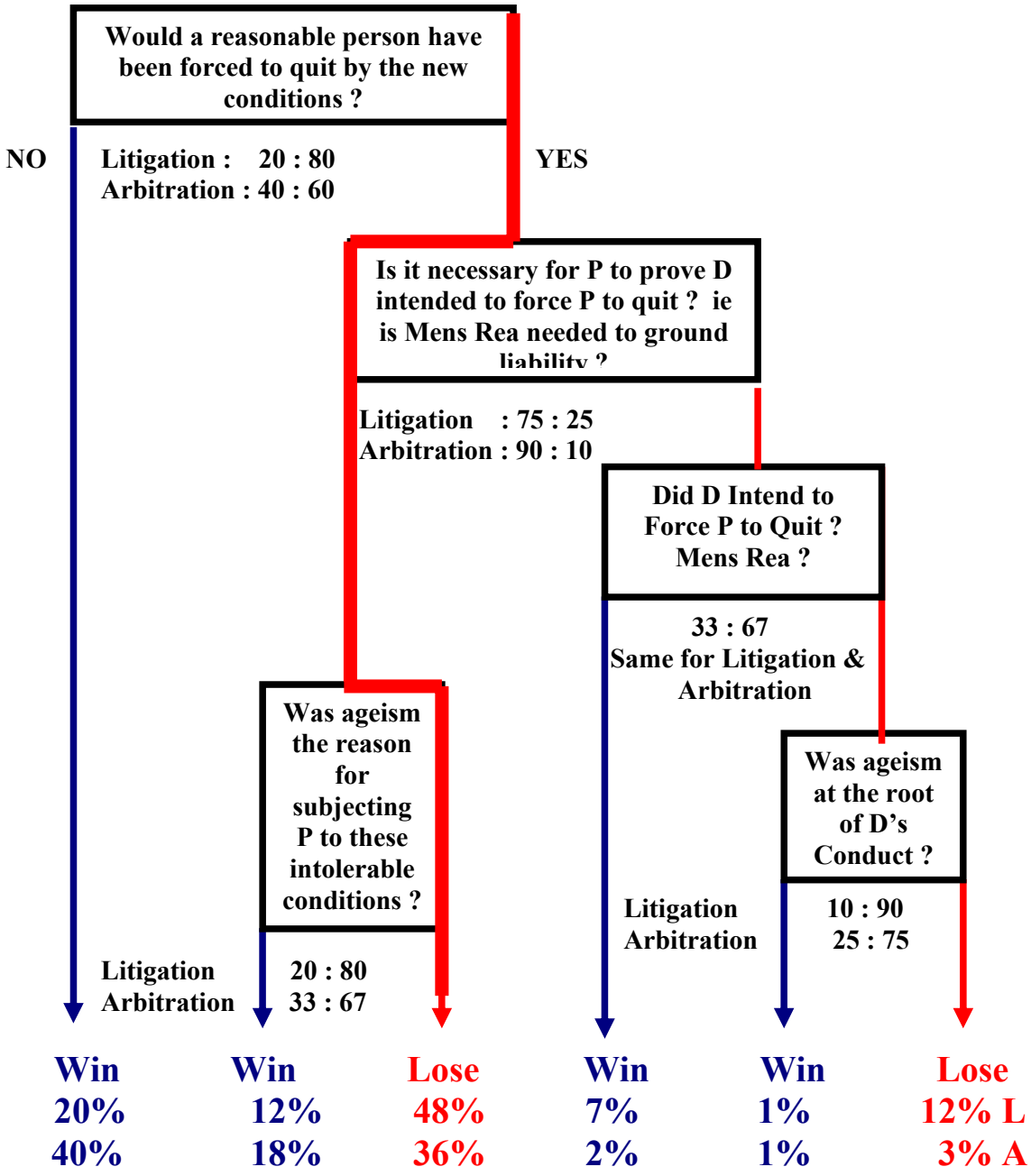
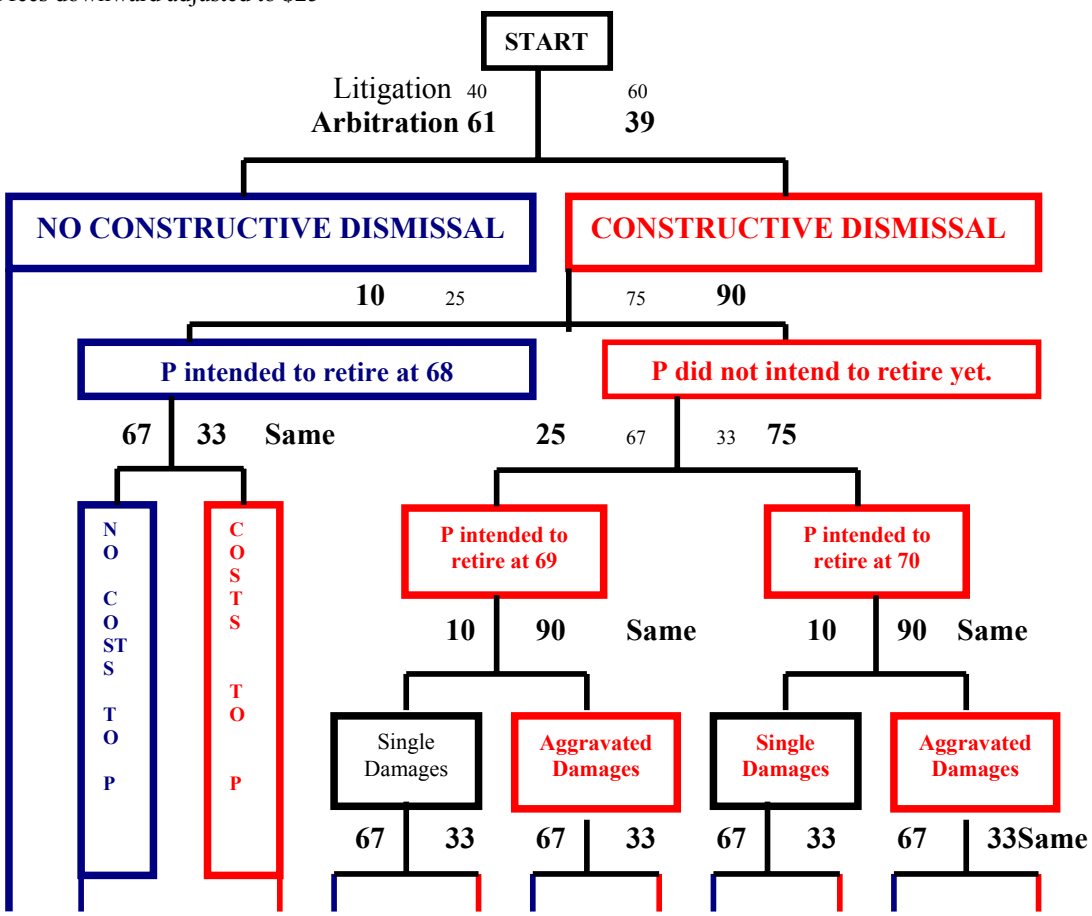


Figure 13.

Comparison between D's Litigation and Arbitration Payout Probabilities

Costs and fees downward adjusted to $25



Litigation

a)	50 50	50 50	50 50	50 50	50 50	50
b)	50	50 50	50 50	50 50	50 50	50
c)		50	50	50	50	50
d)		50	50 100	100 100	100 200	200
e)	50 100	150	200	200	300	
f)		150	200	250	250	350
	40% 10%	5% 2%	1% 18%	9% 1%	0.5% 9%	4.5%

Arbitration

a)	25 25	25 25	25 25	25 25	25 25	25
b)	25	25 25	25 25	25 25	25 25	25
c)		50	50	50	50	50
d)		50	50 100	100 100	100 200	200
e)	25 50	100	150	150	250	
f)		100	150	200	200	300
	61% 2.6%	1.3% 0.6%	0.3% 5.3%	2.6% 1.8%	0.9% 15.9%	7.8%

a). D's costs :
b) Constructive Dismissal :
c) P's fees :
d) Award to P for lost wages :
e) D's total payment if no costs awarded against D :
f) D's total payment if ordered to pay P's costs.

Figure 14.

Comparison of Defendant's "Expected Value" for Litigation & Arbitration

This is represented by the sum of the percentage value of each probability

Litigation					Arbitration				
$50	x	40%	=	$20.	$25	x	61%	=	$12.20
$100	x	10%	=	$10.	$50	x	2.6%	=	$1.30
$150	x	7%	=	$10.5	$100	x	1,9%	=	$1.90
$200	x	20%	=	$40.	$150	x	7.4%	=	$11.10
$250	x	9.5%	=	$23.75	$200	x	3.5%	=	$7.00
$300	x	9%	=	$27.	$250	x	15.9%	=	$39.75
£350	x	4.5%	=	$15.75	£300	x	7.8%	=	$23.40
TOTAL		**100%**	**=**	**$147.**	**TOTAL**		**100%**	**=**	**$96.65**

A similar exercise on Figures 10 & 11 to reflect the adjusted expected Gains and Losses of P in arbitration as opposed to litigation would result in a higher expected gain figure for P as a result of the lowering of costs. Thus arbitration would narrow the gap between the worst case scenario expectations of the parties, paving the way for a pre-trial / pre-arbitration settlement.

Litigation Risk Analysis As the First Step.

It is not unusual for a solicitor to ask his opponent what it would take to dispose of the case. In many instances the response is one of being hemmed and hawed and finally a response of the order of "I am not ready to talk money or specifics yet" will be elucidated. This is a frequent occurrence. Many solicitors and especially their clients like the idea of shutting down litigation, but fail to appreciate the amount of preparation necessary before ever having that first meeting with the other side. A thorough analysis of the litigation alternative will usually be a critical step before proceeding very far with any form of ADR.

Mediation Gain Analysis.

If the party representatives cannot broker a pre-trial settlement the dispute may move to mediation. Since mediation relies on agreement as opposed to an award there is no risk involved so it is not possible to make a probabilities risk analysis. Rather, the party representatives and the mediator can each make use of the arbitration and litigation risk probabilities analysis to close the gap between the expectations of the parties and then to close that gap using the low cost benefits of mediation as a lever. A win / win situation can arise whereby the gap between the parties' expectations is bridged cost free to the parties built on the opportunity to minimise litigation costs. A further incentive being that the dispute can be put to rest quickly and the parties can get on with their business interests having gained instant cash or minimised expenditure.

Self Assessment Exercise No 7

1. Consider the role that risks analysis might play in the mediated settlement process.
2. Consider whether or not mediation should be interests of rights based.
3. To what extent, if at all, is it legitimate for a mediator to provide the parties to a mediation with his personal assessment of risk?
4. It is desirable for a mediator to push the parties towards evaluating their risks and opportunities in the trial process?
5. Does the subjectivity of risk analysis render the concept meaningless?

ADDITIONAL READING

Victor, The Proper Use of Decision Analysis to Assist Litigation Strategy, 40 Business Lawyer 617 (1984)

Victor, How Much Is A Case Worth?, Vol.20 No.7 Trial 48 (July 1984),

Tversky and Kahneman Judgment Under Uncertainty: Heuristics and Biases, 185 Science 1124 (September, 1974).