3 of 5 DOCUMENTS

The Review of Litigation

Winter, 2003

22 Rev. Litig. 1

LENGTH: 27783 words

ARTICLE: Correcting Uncertain Prophecies: An Analysis of Business Consequential Damages

NAME: George P. Roach*

BIO: * George Roach is the founder of Multi Discipline Consultants, a litigation consulting firm in Dallas. His background includes an MBA (high honors) in 1975 from Harvard University and a JD (honors) from the University of Texas in 1993. He worked as an investment banker for Drexel Burnham Lambert and managed an in-house consulting group for a litigation firm in Dallas. He wishes to express his gratitude to Scott Hershman, Richard Dobbyn, Neil Freeman, Bill Michiels, and Alan Goedde for their constructive comments and patient assistance.

SUMMARY:
... If you filed a complaint in 2000 claiming business damages to an airline in a case that will go to trial after 2002, can or should your expert consider the impact of the tragic events of September 11, 2001, when she calculates consequential damages? Is such ex post data admissible, or, if not, could it be considered by the expert because such review would be normal industry practice? Given the choice between using ex ante or ex post data, which approach should a plaintiff pursue absent any expectation of how actual events will compare to projections? This Article will show that such ex post data is normally admissible, but the optimal approach depends on each jurisdiction's position on a number of related issues concerning damages calculation. ... Until the artificial distinctions between lost profits and going concern value methodology are eliminated, litigators will continue to have opportunities to optimize damage awards only when all such tactical choices are explored by (1) careful review of the jurisdiction's case law to determine which combinations of approaches are admissible, and (2) close interaction with a damages expert that can calculate damages using all alternative approaches. ... The most prevalent practice is to admit ex post data for lost profit calculation and to establish the trial date as the dividing line between past and future profits. ... Of course, each state's definition of what is an unestablished business or a speculative projection may differ. ... First, the use of ex post data for valuations can be abused so that the expert is determining what the market value theoretically should have been rather than the value that the market would have actually assigned. ...

TEXT:
[*1]

Summary

If you filed a complaint in 2000 claiming business damages to an airline in a case that will go to trial after 2002, can or should your expert consider the impact of the tragic events of September 11, **[*2]** 2001, when she calculates consequential damages? Is such ex post data admissible, or, if not, could it be considered by the expert because such

review would be normal industry practice? Given the choice between using ex ante or ex post data, which approach should a plaintiff pursue absent any expectation of how actual events will compare to projections? This Article will show that such ex post data is normally admissible, but the optimal approach depends on each jurisdiction's position on a number of related issues concerning damages calculation.

The largest part of commercial damages today consists, either separately or together, of lost profits and the decline in going concern value, both of which are considered to be consequential damages. American common law provides for consequential damages to be calculated differently from general damages. The calculation date for consequential damages, for example, is generally the date of the trial, and most courts admit evidence relating to events that occur after the disputed wrongdoing ("ex post data") for at least the lost profits approach. In addition, measuring damages on the basis of fair market value provides less complete indemnity for consequential damages than general damages.

Consequential damages to a business are based largely on income projections, regardless of whether they are calculated according to the lost profits or going concern value method. The use of ex post data can reduce the speculativeness of income projections, because it corrects projections with actual outcomes. The failure of many courts to understand that both approaches depend on projections, and the general bias of the courts against the use of ex post data, lead them to conclusions at odds with their goal of reducing speculative valuation.

There can be a significant difference in lost profits damages calculated with ex ante or ex post data as the delays for trial lengthen and actual events vary from ex ante expectations. In jurisdictions that draw arbitrary distinctions between the applicability of lost profits or going concern value to determine damages for certain types of claims, this difference can be widened or narrowed by the availability of the lost profits method; conversely, the difference between lost profits and going concern value is affected by the availability of ex ante or ex post data.

To avoid a holding that disallows the use of lost profits to calculate damages for the destruction of an entire business, some **[*3]** plaintiffs claim that, in effect, the business was only partially destroyed, or they just fail to claim its total destruction. In the jurisdictions that make such a distinction, it is sometimes preferable for a plaintiff to claim partial destruction, because damages for partial destruction can be calculated by lost profits as of the date of trial rather than the going concern value on the date of termination. Less can be worth more!

Some litigators would be surprised to learn that the use of ex post data has been widely endorsed. Both the U.S. Supreme Court and the Federal Appeals Circuit have issued long-standing opinions that support calculating damages with ex post data. Many state supreme courts and most federal circuits are also supportive. The Ninth Circuit opinion against the use of ex post data mistakenly relies on a Supreme Court opinion that has been specifically limited against the use made by the Ninth Circuit. Some of the other jurisdictions' rulings against ex post data appear neither consistently applied nor well supported. Furthermore, some courts are beginning to criticize the inability of ex ante analysis to exclude the impact of independent intervening events in calculating damages.

Until the artificial distinctions between lost profits and going concern value methodology are eliminated, litigators will continue to have opportunities to optimize damage awards only when all such tactical choices are explored by (1) careful review of the jurisdiction's case law to determine which combinations of approaches are admissible, and (2) close interaction with a damages expert that can calculate damages using all alternative approaches. However, it is generally true that the use of ex post data is a preferable strategy, or even a dominant competitive strategy, for the plaintiff's attorney to pursue, because ex post data has more credibility with the jury, it appeals to the plaintiff's business optimism, and it forces defense counsel to conform or be at odds with actual results.

I. Introduction

Today, the calculation of consequential damages to business operations is driven by damages to commercial goodwill. The transformation of American corporations from smokestack factories **[*4]** to information processors has diminished the importance of tangible assets to the value of business operations as compared to intangible assets. Current estimates

of the average ratio of market capitalization to book value for publicly held corporations range from 210% to 550%. n1 These estimates justify the conclusions that tangible assets account for less than 30% of the average public corporation's market value and that commercial goodwill accounts for more than 70%.

Commercial goodwill is determined by the capital market's expectation that the business will experience a superior rate of return in the future. n2 These expectations or market projections drive Wall Street's capital markets and therefore dominate the estimation of goodwill or business value in litigation today. Accordingly, the accuracy and fairness of damage claims to business operations vary with these projections.

The reasonableness of business projections used in the legal system is frequently questioned, and their occasional disrepute owes in part to the fact that the legal system provides insufficient disincentives for biased projections. n3 A Wall Street firm that makes biased projections is risking its own commercial goodwill, which is subject to the market's penalties for lost credibility and reputation. The consequences for biased projections in the legal system are less **[*5]** exact or assured, even after the effects of Daubert v. Merrell Dow Pharmaceuticals, Inc. n4 have been felt.

While few doubt that the system is abused, the evidence is generally only anecdotal. However, a study of business valuation in the bankruptcy system developed some interesting proof that valuation in the bankruptcy courts is influenced by the strategic interests of the parties and by those parties' ability to influence management projections. n5 As the bankruptcy system is generally regarded as a more financially sophisticated arena, this evidence should be a cause of concern for general business litigation.

It would therefore seem that the use of ex post data could be valuable in reducing the potential bias of the projections underlying damage analysis and the estimation of business value. Many courts welcome this opportunity to corroborate key assumptions underlying the projections, but other courts dismiss such data and insist that damages should be based only on data or facts available before or contemporaneously with the wrong. n6 Furthermore, some respected economists claim that damage methodology based on ex post data is upwardly biased. n7

II. Key Tactical Choices for Damages Calculation

Before the case law is reviewed, some of the key tactical choices necessary to calculate business damages will be identified and discussed in isolation:

[*6]

(1) General and consequential damages;

(2) Lost profits or going concern value;

(3) Partial or "quasi-" termination;

(4) Calculation date options; and

(5) Ex post data.

Obviously, there are other important choices related to damages (including prejudgment interest, punitive damages, equitable relief, and claims for legal fees), but they are beyond the scope of this Article.

A. General and Consequential Damages: Calculate Damages Differently

Dan Dobbs, in Law of Remedies, identifies three types of damages: general, replacement cost, and consequential. n8 General damage claims relate to damages to the plaintiff's tangible assets and are most frequently measured by the assets' market value. Dobbs refers to this approach as the market or general approach. n9 Depending on the plaintiff's complaint, she may pursue either the replacement cost or the market approach to measure out-of-pocket damages or expectancy losses. To claim losses to her present or future income statement, however, the plaintiff must claim consequential damages. n10 Thus, a plaintiff that is making a claim for the interruption or termination of her business and calculating damages on the basis of the fair market value of the business is making a claim for consequential damages, not for market or general damages. n11

The potential for confusion is significant. The calculation date for the market approach is generally the date the alleged wrong **[*7]** occurred, n12 but the calculation date for consequential damages is the date of trial. n13 The market price for general damages is generally determined by reference to commodity or quasi-commodity markets, while consequential damages are largely based on projections. n14

Consequential damages are treated with greater skepticism. In jurisdictions such as Texas, they must be specifically pleaded, n15 and in all jurisdictions the foreseeability or proximate cause of the damages may be contested. n16 The biggest change in the case law for these damages is that most states now allow newly established businesses the opportunity to prove their losses, as opposed to **[*8]** following the previous majority rule that considered such claims excessively speculative per se. n17

The use of fair market value to measure damages is better suited for general, rather than consequential, damages. Market value was originally used to determine the cost of replacing the exact assets that were lost. n18 As long as the lost asset can be replaced with an identical substitute in an active market, the plaintiff can be restored to her original condition, or her expectation can be realized exactly. n19 Furthermore, when the plaintiff has the opportunity to replace her lost asset with an identical substitute, the principles of mitigation should limit her loss to that replacement cost. n20

When exact substitutes are unavailable, such as for an entire company, the fair market value must be estimated and may fall short of complete indemnity. n21 The determination of fair market value is based on a key assumption that the price is agreed to by a willing buyer and a willing seller. Applying a measure of market value to consequential damages contradicts those assumptions, because the plaintiff was not a "willing seller." For example, if someone forced you to sell to him your home, would its market value be fair compensation to you, an unwilling seller? Your ownership of the house evidenced the fact that you were not a willing seller or that you believed that the house was worth more than its market value, or both. Furthermore, the house may have greater personal use value **[*9]** than the market would reflect. Both the Restatement (Second) of Torts and the Restatement (Second) of Contracts envision the need to vary from the fair market standard and agree that damages from loss in value should sometimes be considered from the perspective of the injured party rather than being assigned "their value to some hypothetical reasonable person on some market." n22 In some conversion cases, courts distinguish the valuation standard for marketable goods from that of property used for the personal enjoyment of the owner as follows: value of the latter can be based on the use value to the owner, rather than the market price in a second-hand arena. n23

Measuring the difference of the value of a business to its owner and its value to the market can be approximated by comparing the owner's expectations to the objective expectations of the market for that business. n24 The owner is an expert on her own business; she knows the market and how the business operates. To avoid the appearance of biased analysis, however, most lawyers prefer to present a credentialed, objective expert who determines the market's **[*10]** expectations for the business. n25 The fair market value of a business is based on the market's expectations, not those of the owner. n26

This discrepancy has been recognized from time to time, but fair market value is still the predominant measure of consequential damages to a business. Justice Cardozo had these limitations in his 1993 opinion in Sinclair Refining Co. v. Jenkins Petroleum Process Co., n27 in which he suggested that a different measure is sometimes needed to determine damages for an undeveloped patent:

An imaginary bid by an imaginary buyer, acting upon the information available at the moment of the breach, is not the limit of recovery where the subject of the bargain is an undeveloped patent. Information at such a time might be so scanty and imperfect that the offer would be nominal. The promisee of the patent has less than fair compensation if the criterion of value is the price that he would have received if he had disposed of it at once, irrespective of the value that would have been uncovered if he had kept it as his own. Formulas of measurement declared alio intuitu may be misleading if wrested from their setting and applied to new conditions. The market test failing, there must be reference to the values inherent in the thing itself, whether for use or for exchange. These will not be known by first imagining a forced sale, and then accepting as a measure its probable results. The law is not so tender to sellers in default. n28

Thus, even though fair market value is still the predominant measure of consequential damages, its legitimacy rests on the shaky assumption that the plaintiff is a willing seller in the "forced sale." Misgivings as to the fairness of such a measure have been raised for **[*11]** many years with regard to the use of actual market values, let alone fair market values generated hypothetically on the basis of ex ante projections. Therefore, the use of ex post data in such a process could improve the fairness of the process even if the plaintiff's expectations are not formally incorporated.

B. Lost Profits or Going Concern Value: Arbitrary Distinctions for Selected Claims

A large source of confusion about commercial consequential damages is the perception that the lost profits and the going concern value methods rely on different levels of speculation. In particular, it is sometimes perceived that only the lost profits methodology is based on projections. However, the lost profits approach is methodologically similar to the Income Approach of the going concern value method, and the other principal approach, the Market Approach, is equally based on projections. n29

It is well accepted that the fair market value of a privately held business is estimated to be the largest of the values determined by the following three methods: n30

(1) Income Approach: the net present value of the business's profits; n31

(2) Asset Approach: the difference between the market value of its assets and liabilities; or

[*12]

(3) Market Approach: the comparable fair market value of the business as determined by either comparable publicly traded corporations or comparable companies purchased in whole.

Unless the company has significant asset holdings such as real estate, securities, or natural resources, the first or third method usually generates the largest value. Because it applies to a relatively small subset of the corporate population, the Asset Approach will not be considered further in this article. n32

To calculate the value according to either the first or third approaches, the business appraiser calculates value on

the basis of her understanding of the market's expectations for the subject company, which can be simplified into three key areas of information about the subject company: n33

(1) Growth: its expected growth in revenue for the foreseeable future;

(2) Profitability: the company's profitability over time; and

(3) Risk: its financial structure and other risk characteristics.

The Income Approach capitalizes projected profits with an estimated cost of capital. The analyst makes specific profit projections for a fixed period of time (generally three to ten years) and then estimates a terminal value at the end of that period based largely on assumptions of how the company will perform into **[*13]** perpetuity. n34 Ironically, some observers continue to criticize projections for lost profits that extend past five or ten years, but raise no objections to Income Approach valuations that project through "infinity and beyond." n35 While it may seem somewhat arrogant to claim the ability to project into perpetuity, this is a useful simplifying assumption that reflects the unlimited life expectancy of a corporation. Therefore, the Income Approach is similar to the lost future profits claim, except that the Income Approach is based on a longer time horizon and almost always generates a value greater than the present value of lost future profits.

In discussing its concern about how far into the future lost profits can be projected without excessive speculation, the Connecticut Supreme Court noted that many trial judges have accepted lost profits analyses projecting ahead for ten to fifteen years when the plaintiffs' operations have had leases or contracts for that period of time. n36 The existence of a lease seems to satisfy a necessary condition. Such a contract may provide the necessary assurance that a plaintiff will be able to continue to provide her goods or services, but it remains unclear how the court can be sufficiently assured that a plaintiff's projected revenues and profit ratios are any less speculative. Alternatively, courts have also held **[*14]** that leases can be assumed to be renewed, n37 and still other courts have left the expected life of the lease for the jury to determine. n38

The Market Approach capitalizes projected profits on the basis of value multipliers, which are deduced from equity market values and financial data. n39 Equity market values are derived from the stock prices of comparable publicly traded corporations or the transaction prices in mergers. n40 Value multipliers (value as a multiple of forecast profits or EBITDA n41) must be interpolated to adjust for the company's strengths and weaknesses as compared to similar companies with known market values. n42 Some courts are beginning to make some sophisticated distinctions about the use of comparable data. n43 The Market Approach is forward-looking, although as a last resort analysts use historical patterns as proxies for the future. n44

In either approach, expected profits (adjusted for risk) are the key determinant of value. When an investor buys a small piece of a company in the form of a few shares, or when he buys the whole **[*15]** company, he is investing in its future dividends and capital appreciation, not its past. As Justice Holmes observed, "The commercial value of property consists in the expectation of income from it." n45 Furthermore, it follows that a method that improves the estimation of expected income will reduce the speculativeness of the resulting value.

Business goodwill is the difference between a going concern value and the market value of its tangible assets (adjusted for its liabilities). n46 Thus, if a company's value is highest under the Asset Approach, it has no goodwill because its fair market value is no greater than the total value of its tangible assets. n47 For most publicly traded

corporations, however, goodwill exceeds 70% of the total market value and constitutes the largest single asset in the value of the corporation. n48 Therefore, over a reasonable range, the present value of the loss of future profits should be equal to the change in the value of the business or the value of the goodwill. n49 It is not unusual for a plaintiff to claim damages for the decline of the business's **[*16]** goodwill as a proxy for the decline of the value of the business. n50 In fact, Dobbs concludes that lost goodwill is a lost profits claim. n51

Lost profits is probably the most common claim for commercial consequential damages. n52 It is useful to distinguish between lost past profits and lost future profits because they can be treated differently, especially in cases involving unestablished businesses and terminated businesses. n53 In addition, sometimes the defendant's actual profits are considered a rational proxy for plaintiff's lost profits. n54

Lost past profits are based on a historical analysis of the plaintiff's accounting statements and a hypothetical "but for" model, and they are calculated as the difference between the plaintiff's actual profit and the plaintiff's hypothetical "but for" profit. n55 The most **[*17]** prevalent practice is to admit ex post data for lost profit calculation n56 and to establish the trial date as the dividing line between past and future profits. n57

In most cases, a company's value is the present value of its future profits. n58 Therefore, a claim for lost future profits represents a claim for lost company value or lost goodwill. To avoid the problem of making a redundant or overlapping claim, the plaintiff should take care never to claim lost future profits for the period beyond the valuation date for the going concern value. n59

In Eastman Kodak Co. of New York v. Southern Photo Materials Co., n60 the Supreme Court commented favorably on the standard for claiming anticipated profits described in Central Coal & Coke Co. v. Hartman, n61 another federal antitrust action. n62 The general rule was that "the expected profits of a commercial business are too remote, speculative, and uncertain to warrant a judgment for **[*18]** their loss"; but "the loss of profits from the destruction or interruption of an established business may be recovered where the plaintiff makes it reasonably certain by competent proof what the amount of his loss actually was." n63 Two important points about this standard are as follows: (1) the court did not distinguish between the total and partial destruction of the business with respect to the awarding of lost profits, and (2) this quote would be an accurate description of most states' present-day standard for lost future profits of unestablished businesses.

In cases claiming the wrongful termination of a business, many courts have held that only the change in the fair market value of the business as of the date of termination may be used to measure damages. n64 The court in Sawyer v. Fitts n65 admitted that there was no precedent for the holding, but borrowed its reasoning from damages rules for personal property:

Where loss of anticipated profits results from injury to personal property, recovery is limited to the period of time reasonably necessary to restore the property to its condition immediately prior to the injury. Where there has been an entire loss of the property involved in the action, the full value of the property is the measure of damages, and there can be no recovery for anticipated profits. n66

[*19] The court remanded the case for redetermination of damages, holding that the plaintiff was not entitled to recover lost profits. n67 Interestingly, many of the same opinions volunteer that lost profits would be an appropriate measure for the partial destruction of the personal property or business. n68 On the other hand, in cases concerning the wrongful termination of franchise agreements, the majority rule is to apply the lost profits approach for the valuation of a terminated franchise. n69

Konrad Bonsack traces the mandatory use of going concern value for terminated businesses back to the common law form of action of trover, n70 which was aimed to remedy the tort of conversion **[*20]** but was based on the

assumption that the damaged asset was immediately replaceable on the market and that there was little or no delay between the damage and the receipt of the compensation. n71 However, Bonsack quotes Charles McCormick's belief that, as early as 1935, the majority view was that "the traditional measure of recovery on a basis of value at the time of the wrong has impressed them as harshly insufficient." n72 Equally important is the arbitrary distinction that is drawn between the loss calculations for partial and total destruction of a business: lost profits for partial destruction, and change in market value for total destruction. The California Supreme Court renounced this distinction for personal property:

There appears to be no logical or practical reason why a distinction should be drawn between cases in which the property is totally destroyed and those in which it has been injured but is repairable, and we have concluded that when the owner of a negligently destroyed commercial vehicle has suffered injury by being deprived of the use of the vehicle during the period required for replacement, he is entitled, upon proper pleading and proof, to recover for loss of use in order to "compensate for all the detriment proximately caused" by the wrongful destruction. n73

The traditional application of trover ignores events subsequent to the destruction of the asset, thereby excluding ex post data. The distinction between the use of lost profits and market value is thus compounded into a choice between lost profits with ex post data or market value with ex ante data, resulting in the following strategic advice:

More complete compensation is provided a plaintiff by making the measure of damages the profits he lost due to the violation rather than the market value to **[*21]** someone else of the chance to try to make them. Also, in a direct claim for future profits, evidence of events after the violation clarifying the extent of the harms to the plaintiff is admissible since market value at a given time is not in issue. Since a lost market value measure depends heavily on the profit potential of the firm, it encounters the same uncertainties as does a direct lost profits measure. And prevailing market values may not reflect the profit potential accurately - industry-wide restraint on competition or other factors may distort market values. Still, even when lost profits are too speculative to be measured directly, loss in market value can be a valuable substitute measure of damages because it may tend to include an amount reflecting the business community's rough estimate of what the firm's profit potential was. n74

For all of its insight, however, this advice perpetuates the misconception that even though market value "depends heavily on the profit potential of the firm," lost profits can be a more speculative damages measure than market value. n75 Courts that exclude lost profits damages for terminated businesses frequently and mistakenly allege that lost profits is a more speculative measure of damages because it is based on profit projections. n76

The Harvard Law Review Note cited above makes a second distinction: the lost profits or going concern value methods should apply equally well in a case involving the partial destruction of a business. n77 In contrast, Robert Dunn, in Recovery of Damages for Lost Profits, states that the majority rule is that lost profits is to be used only in cases of partial destruction, and going concern value is **[*22]** to be used only in cases of total destruction of a business. n78 This schism may help to explain the prevalence of the unofficial practice of partial or quasi-termination, which will be explained in the next section.

A minority of states have a per se rule rejecting evidence of lost future profits for unestablished businesses because the lost profit projections are deemed excessively speculative. n79 The majority rule is now to admit such projections if the plaintiff can satisfy the court that they are not excessively speculative. n80 Of course, each state's definition of what is an unestablished business or a speculative projection may differ. Factors that are considered in judging the establishment of a business include the following: the existence of an established market for the product or services, the degree of proof of the technology involved, the experience of the management or company undertaking the enterprise, and evidence of profitability of the service or product. n81 A plaintiff pursuing a brand new technology in an unproven

market with inexperienced management is unlikely to be able to present non-speculative projections.

The Income Approach and lost profits method can produce different results. Sometimes the lost profits approach overlooks the fact that the value of a business can also be altered by changing the business's expected growth rate or its perceived risk. For example, this author recently participated in a dispute in which a bank breached a lending agreement to provide capital to construct fifteen outlets over the course of four years. n82 After five outlets had been **[*23]** completed, the lender refused to finance the other ten. It was determined that the present value of the lost profits for five years of operation of the missing ten outlets was only one third of the damages represented by the difference in the total value of the company with fifteen outlets or five outlets. The difference was due to the value of the lost profits beyond five years and the higher EBITDA multiplier for the larger chain due to greater size, diversification, and growth. n83

C. Partial or Quasi-Termination: End Run to Claim Lost Profits

A practice has evolved in various federal and state courts for the plaintiff whose enterprise was effectively terminated to offer evidence of the enterprise's profitability without opinions on the enterprise's going concern value. n84 In effect, the plaintiff circumvents the requirement of application of the going concern value. Sometimes evidence of lost profits is offered as one indication of value, and at other times as the only evidence of damages. n85 The absence of the going concern value is frequently unnoticed, or noticed without objection, either by defense counsel or by the court itself.

A key factor that may facilitate this practice is that errors in calculating damages are not considered to be reversible error. n86 Unless the defendant makes a timely objection to the calculation of damages, including such issues as significant arithmetic errors or the **[*24]** failure to present damages on a present value basis, the defendant is estopped from later challenging the damages presentation. n87

What is the dividing line between the partial and total termination of a business? If the focus of the analysis of whether an enterprise is established should be on the establishment of the enterprise rather than the entity, as suggested by the Texas Supreme Court, n88 should not the termination of a company's major product line be treated as a termination of the enterprise rather than as a partial termination of the company?

In the case of DSC Communications v. Next Level Communications, n89 the Fifth Circuit affirmed a damages award for the misappropriation of trade secrets. n90 Damages in excess of $ 50 million were awarded to DSC Communications for a significant loss of market share. n91 As opposed to this model for partial termination, most of the cases discussed below relate to plaintiffs whose businesses were totally destroyed or prevented from being established. A plaintiff is deemed to be making a claim for quasi-termination when the enterprise was terminated, but the plaintiff ignored the "total" termination as a matter of form. n92 Strong **[*25]** evidence of quasi-termination exists when the claim for lost future profits dwarfs the other damages in size. n93

The easiest cases to explain are those in which the juries seemingly ignored the plaintiffs' claims for lost profits. In Texas Instruments, Inc. v. Teletron Energy Management, Inc., n94 a breach of contract action that reached the Texas Supreme Court, the unestablished company claimed damages of $ 1.3 million in additional expenses, $ 14 million in lost past profits, and $ 54 million in lost future profits for Texas Instruments' failure to meet its contractual obligations to successfully construct a new voice-programmable thermostat. n95 The claims for lost profits were denied. n96

The next group of cases are those in which lost profits is awarded, and the courts' opinions address the defendants' claims that the evidence supporting the damage awards was extremely speculative. In these cases, the difference between the lost profits and going concern value methods is not raised. For example, the plaintiff in St. Paul Surplus Lines Insurance Co. v. Dal-Worth Tank Co. n97 persuaded the jury to award damages of $ 2.16 million for the termination of its propane tank business with expert testimony that the business would have otherwise enjoyed annual profits of $ 216,000. n98 The appellate court voided the lost profits award, **[*26]** because the plaintiff showed no evidence of how many years the business would have enjoyed those profits. n99 However, the jury award of $ 500,000 for loss of the company's credit reputation was affirmed. n100 This award was later reversed by the Texas Supreme

Court, which held the evidence insufficient to establish damages to the plaintiff. n101 The opinion fails to mention that the jury's award of both claims together would be redundant. n102

In the case of Western Geophysical Company of America, Inc. v. Bolt Associates, n103 the Second Circuit accepted plaintiff's damages analysis as measured by the actual profits of the defendant. n104 With New York law governing, the Second Circuit found the defendant's subsequent licensing revenues an adequate and rational measure of the plaintiff's lost licensing revenues from defendant's wrongful termination of an exclusive license. n105 The court's justification resembles that of unjust enrichment: n106

If damages were not based on Bolt's profits, there would be no way to calculate the loss; Western had not yet earned any profits and Western apparently had no projected marketing scheme from which future profits could be estimated. Thus, Bolt would achieve a benefit from terminating the contract before Western began to achieve profits. n107

This is an unusual opinion for the Second Circuit, which has otherwise interpreted New York law to accept only going concern value as the measure of business termination damages and to reject **[*27]** the use of ex post data. n108

In two other cases, the courts specifically discussed the going concern method, but approved the lost profits approach. The two cases are similar in that the plaintiff in each is generally a new or unestablished business, while the defendant is an established business that has already been found liable for an antitrust violation.

The Eighth Circuit's opinion in Twentieth Century-Fox Film Corp. v. Brookside Theatre Corp. n109 concerned an antitrust claim alleging that Fox terminated a theater's business by conspiring to deprive the plaintiff of first-run movies. n110 The Brookside Theatre was built by a third party who granted a fifteen-year lease to Brookside Theatre Corporation. n111 When the lessee could not obtain first-run films, it sold the leasehold interests to Fox, which had no trouble obtaining and exhibiting first-run films. n112 The trial judge ruled to admit the testimony from the plaintiff's accountant, who examined and summarized the subsequent operating history of the theater under Fox's management for the remaining thirteen years of the lease. n113 The Eighth Circuit affirmed the trial judge's ruling and rejected Fox's position that "the evidence should have been limited to show the difference between what plaintiff received on the sale of its property and its fair market value on that date." n114

Given the uncertainty of the plaintiff's ability to renew its lease, it could seem reasonable to deem the lease the entire expected life of the business. The Eighth Circuit justified its holding on the basis that the jury instructions about the accountant's testimony were low-key: "Such profits are simply one of the elements to be taken into consideration in determining plaintiff's damages, if any." n115

[*28] The best example of potential mischief for this quasi-termination damages practice involves the Fifth Circuit opinions in Household Goods Carriers' Bureau v. Terrell n116 ("Terrell I") and Terrell v. Household Goods Carriers' Bureau n117 ("Terrell II"). Terrell was asserting an antitrust claim for the termination of his unestablished business. n118 In Terrell I, Terrell's expert calculated damages as the lost profits from the date of termination to the date of trial (1962 to 1968), n119 a standard claim for lost past profits based on ex post data. The en banc court approved the method, subject to confirmation of the assumptions. n120 When the case came back to the Fifth Circuit in 1974, however, Terrell's expert calculated damages as the profits lost between 1962 and 1975. n121 In effect, Terrell's expert added claims for lost future profits, but the court did not recognize the change. The defendant objected to the measure of damages, claiming that the only appropriate measure was the going concern method. n122 The Fifth Circuit responded that the damages method had already been approved in Terrell I, invoking the law of the case. n123 However, nowhere in the Terrell I opinion did the Fifth Circuit hold that lost future profits were an appropriate measure of damages; Terrell claimed no lost future profits until Terrell II. The court in Terrell II further supported the earlier holding by noting that the plaintiff's operation was unestablished and that "expected profits" was the only viable method for the situation. n124

On a substantive basis, it is hard to disagree with the results reached in any of these cases. What is unfortunate is that the plaintiffs had to resort to unusual measures to achieve the outcome. In addition, the Fifth Circuit endorsed the use of lost profits or going concern value in Lehrman v. Gulf Oil Corp. n125 ("Lehrman I") and Lehrman v. Gulf Oil Corp. n126 ("Lehrman II") at almost the same time as Terrell II, and the Eighth Circuit also adopted lost profits later in **[*29]** Albrecht v. Herald Co. n127 A company that has expected or projected profits has a going concern value that should be at least equal to the present value of its lost profits. Conversely, any company that has a going concern value in excess of the market value of its net assets should be able to establish expected profits.

As the system presently operates, however, it is possible that in a jurisdiction that forbids the use of lost profits for a totally destroyed business and allows ex post data for lost profits analysis but not for going concern value, a plaintiff would be awarded higher damages by claiming damages to only a part of the business rather than to the whole business - claiming that the business was quasi-terminated. Less is worth more!

D. Calculation Date: Not Necessarily the Date of the Wrong

There is substantial disagreement and confusion about the appropriate date for calculating damages. n128 The Restatement (Second) of Torts provides that the date of calculation is the date of trial. n129 In some types of claims or litigation, the calculation period is clearly specified by statute. n130 For the vast majority of contract, tort, and other claims, however, the appropriate date is less clear.

Dobbs suggests that general or market damages are closed out on the date when the performance was due or the harm was inflicted, but that consequential damages are not closed out until the date of trial. n131 Thus, a plaintiff could reasonably use different calculation dates for different types of damages within the same complaint. **[*30]** Case law offers no such clear distinctions, but does support Bonsack's conclusion that "the purpose of the compensatory damages award is to restore the plaintiff to the position he would have occupied absent the defendant's wrong, not just at a certain point in time but for all time." n132

In the case of Williams v. Gaines, n133 the jury found the defendant liable for defrauding the plaintiff out of fifty percent of a newly established corporation and for unjust enrichment. n134 The court inexplicably held in that case that the value of the newly established company could only be based on the market value of the company assets (including the company's future contracts) and rejected the income approach that the plaintiff's expert applied with the company's ex post operating data. n135 Unfortunately, the expert used the same calculation date, the approximate date of the wrong, for all of the plaintiff's claims. n136 The plaintiff might have avoided the court's misreading of the case law and financial theory if the expert had calculated the unjust enrichment damages as of the date of the trial. The defendant still owned the stock on that date, and the company's operating results would not have been ex post data. n137

The Seventh Circuit disputes the generalization that all contract damages must be computed as of the date of the injury. The court in Fishman v. Estate of Wirtz n138 stated: "We know of no requirement that damages must always be computed as of the time of the injury or, if not, reduced by some appropriate discount rate to produce a value as of that date." n139 The opinion cites the 1971 Supreme Court decision in Zenith Radio Corp. v. Hazeltine Research, Inc. n140 in support of this conclusion. n141 Zenith Radio concerned, in part, whether the statute of limitations precluded **[*31]** liability in a current case for ex post events in a prior case. n142 The Zenith Radio Court ruled that a plaintiff's cause of action does not necessarily arise until the damage occurs:

In antitrust and treble-damage actions, refusal to award future profits as too speculative is equivalent to holding that no cause of action has yet accrued for any but those damages already suffered. In these instances, the cause of action for future damages, if they ever occur, will accrue only on the date they are suffered; thereafter the plaintiff may sue to recover them at any time within four years from the date they were inflicted. n143

This suggests that the calculation date for consequential damages is the date that the damage is experienced. It could also imply that, if a court finds a plaintiff's damages too speculative, the plaintiff has the option to return to court when the future damages are actually realized.

The First Circuit offers no definitive guidelines, stating only that the calculation date must be chosen to minimize the speculativeness of the damages calculation. In two antitrust cases for wrongful termination, Farmington Dowel Products Co. v. Forster Manufacturing Co. n144 and Coastal Fuels of Puerto Rico, Inc. v. Caribbean Petroleum Corp., n145 the court held that while the calculation date is not the termination date per se, the burden of proof falls on the party asserting an alternative date. n146 In both cases, the plaintiff wanted to calculate damages as the sum of the expected lost profits up to the date of trial plus the going concern value of the **[*32]** business after the trial date. n147 The court's rejection of that approach, and thus the "Farmington Dowel framework," is based on the following explanation:

The method urged by Farmington would have required an estimate of profits for a period of some ten years during which the company neither existed nor made profits, plus an estimate of the "going concern" value in 1968 of a company which had ceased being a going concern over ten years before, which estimate would have involved a further estimate of profits for a more remote future period... . The method urged by Farmington, at least as applied to this case, relies too heavily on speculation and conjecture, particularly concerning the determination of "going concern" value so long after the company ceased to be a going concern. n148

The court believes that it would be less speculative for the damages analyst to determine the company's going concern value as of 1956 than to calculate the company's lost profits from 1956 to 1968 and add the company's remaining going concern value as of 1968. n149 If both approaches used the ex ante method, their calculation would be based on the same projections. n150 As discussed **[*33]** earlier, going concern value is determined by projecting profits over a finite number of future years and then calculating a terminal value. n151 On an ex ante basis, both approaches are essentially the same, although Farmington Dowel's approach would be more specific because it would project operations for twelve years before calculating terminal value, as opposed to most going concern valuations, which use five to ten years of specific projections. n152

On an ex post basis, the plaintiff's hybrid approach would be less speculative, because its claim for lost profits would be based on actual subsequent events. To ensure consistency with the going concern approach, the terminal value would still need to be calculated according to ex ante information and ex ante capitalization rates, but the assumptions underlying that calculation could be corroborated with ex post data for reasonableness.

The damage period or valuation date is even uncertain in cases in which there is a liquid market for the missing asset such as listed securities. Before 1873, the accepted measure of damages in England and in the United States for publicly traded securities was to determine the highest price in the market until the date of trial. n153 Considerations of the plaintiff's duty to mitigate damages have exerted pressure to limit the calculation to a date closer to the date of the wrong. In 1873, a New York court modified this approach to limit the determination period to the time between when the plaintiff learned of the wrong and when the security could reasonably be replaced. n154 This position was largely adopted by the Supreme Court in Galigher v. Jones, n155 except that the opinion appears to leave some latitude for equitable considerations:

To allow merely their value at the time of conversion would, in most cases, afford a very inadequate **[*34]** remedy, and, in the case of a broker, holding the stocks of his principal, it would afford no remedy at all. The effect would be to give to the broker the control of the stock, subject only to nominal damages. The real injury sustained by the principal consists not merely in the assumption of control over the stock, but in the sale of it at an unfavorable time, and for an

unfavorable price. n156

The stock price rule has been summarized as follows: "At the end we reach what may be called the only general modern rule, the value of the property or property rights lost with interest; increased by special circumstances within the limits fixed by the rules governing consequential damages, and limited by the rule of avoidable consequences." n157 If the damages rule for a publicly traded stock with a liquid market is this detailed, why do some courts borrow a simpler standard, to the disadvantage of the plaintiffs, for the more complex issue of replacing a terminated company?

Finally, the calculation date can significantly affect the damage calculation. The First Circuit approach of discounting expected cash flows back to the date of the wrong and then accumulating them forward to the date of the trial at a prejudgment interest rate generates a number substantially smaller than just applying a prejudgment interest rate to lost cash flows. Using reasonable assumptions and a time period of ten years from the date of the wrong to the date of the trial, the Farmington Dowel framework generates a number 20% to 25% lower than the alternative, depending on the difference between the discount rate used to calculate going concern value and the prejudgment rate. n158 In **[*35]** passing, it is interesting to review General Motors Corp. v. Devex, n159 in which the Supreme Court determined that reasonable royalty calculations should include prejudgment interest. n160 Each year's reasonable royalties were accumulated forward at the prejudgment rate; they were not first discounted to the date of the patent infraction and then accumulated forward at the prejudgment rate. n161

E. Ex Ante or Ex Post: Both Widely Accepted

It is common for several years to elapse between the filing of a complaint and the trial date. In antitrust cases, delays of ten years or more are not uncommon. Can or should the expert consider the events that have occurred before trial that relate to the general economy, the plaintiff's industry, and the plaintiff's and defendant's specific operations?

Both the Restatement (Second) of Torts and Restatement (Second) of Contracts endorse the use of ex post data. n162 Section 910 of the Restatement (Second) of Torts advocates the use of ex post data, stating that, other than in some cases of conversion, "the situation as it appears at the time of trial is determinative." n163 Illustration 1 instructs that in litigation in which the verdict from the first trial is set aside, events that occur up through the date of the second trial are admissible. n164 Section 911 on value explains the relationship between the amount of damages and the date of their calculation. n165 Referring to section 927, it shows that injured parties whose damaged or converted assets fluctuate in value may have an election to determine the calculation date. n166 Such assets include not only stocks and commodities contracts, but also growing crops, lottery tickets, and mineral leases.

Section 352(b) of the Restatement (Second) of Contracts also **[*36]** endorses the use of ex post data to estimate lost profits. n167 Illustrations 5 through 7 show that the plaintiff's ex post experience, or even that of the defendant, can provide a sufficient basis for reasonable predictions or estimates of lost business and profits. n168

In Sinclair Refining Co. v. Jenkins Petroleum Process Co., n169 Justice Cardozo wrote a unanimous opinion explaining that ex post data should be admitted when determining the value of a patent:

But a different situation is presented if years have gone by before the evidence is offered. Experience is then available to correct uncertain prophecy. Here is a book of wisdom that courts may not neglect. We find no rule of law that sets a clasp upon its pages, and forbids us to look within. n170

The biggest advantage of using ex post data is the credibility of using actual numbers. Rather than having to explain today what a reasonable expectation three years ago would have been for the next three years, the expert can summarize lost profits on an actual basis. Similarly, in valuing a business as of three years ago, the use of ex post data would allow the appraiser of business value to reconcile her valuation with the events that occurred in the last three years. The court

hears a comparison of projections and actual subsequent events to assist it in assessing the reasonableness of the projections. From the point of view of the jury, ex post data is simpler and easier to **[*37]** understand. n171

In assessing lost profits, projections can only be less accurate than actual results. In valuing a business, the use of actual data would provide some mid-course correction. Why not use ex post data? Why should the data be cut off on the date of the wrong? n172

First, the use of ex post data for valuations can be abused so that the expert is determining what the market value theoretically should have been rather than the value that the market would have actually assigned. Second, courts have questioned whether a plaintiff may seek damages for losses experienced past the date that the complaint was filed. n173 Third, the foreseeability of consequential damages to the defendant has always been an issue. Perhaps the ex ante approach was seen as a better approximation of what the defendant could foresee no later than the date that the complaint was filed. Fourth, the use of the ex ante approach was required in most condemnation litigation because the government should not have to pay a price for the condemned property based on a market value that had been inflated by the announcement of the government project requiring the property. n174

Some of these issues have been resolved. The Supreme Court has established that the plaintiff is entitled to damages incurred beyond the date on which the complaint is filed. n175 Procedures that are appropriate for condemnation cases have been limited to those cases. n176 On the other hand, foreseeability and causation issues are **[*38]** still regularly litigated in cases that apply the ex ante or ex post approach. n177

The ex post approach to the use of data can be applied narrowly or broadly. The narrow application uses ex post data to corroborate or verify the assumptions of damage calculations. n178 The broader approach, typified by the Sinclair Refining opinion quoted above, welcomes the use of ex post data even to second-guess what the market value should have been on the valuation date. n179 It advocates the use of ex post data to prove "elements of value that were there from the beginning." n180 Effectively, the Sinclair Refining opinion called for an ex post valuation that would trump market value because the market test failed to accurately determine value for an undeveloped patent. n181 So far, this application has been used only by the Federal Circuit for patent cases. n182 Perhaps the most extreme use of ex post data endorsed by the Supreme Court was in United States v. Westinghouse Electric Manufacturing Co., n183 which held that the damages award against the government should be delayed until the facts occur and the damages are known. n184 Arguably a plaintiff's nightmare, this holding has not been widely applied.

III. Case Law Accepts Both Ex Ante and Ex Post Data

Much of the federal case law discussed below is from antitrust and patent cases, but many of the opinions are stated **[*39]** broadly and apply beyond those areas of the law. n185 The state law cases are more varied. Both federal and state courts apply the reasonable certainty doctrine in most litigation to determine the sufficiency of proof of damages, but the admissibility of specific evidence is up to the broad discretion of the trial judge. While state courts and federal circuits are divided on the relevance or admissibility of ex post data, especially for going concern values, most state and federal courts admit some ex post data through the "back door" of the courtroom to address issues of causation or damages. n186 Increasingly, courts are finding the pure ex ante approach insufficient to adequately explain causation and damages issues.

The doctrine of reasonable certainty holds that the plaintiff must prove that damage was certain ("damage in fact") and that the amount of damages can be reasonably estimated without undue **[*40]** speculation ("amount of damages"). n187 There has been substantial discussion about how certain is certain and how to distinguish reasonable from speculative. n188 All courts agree that the proof of damage in fact must be more certain than the amount of damages, n189 but few courts specify exact threshold levels for probability or certainty. n190 Dobbs and other experts suggest that only a preponderance of evidence, or 51%, is sufficient to establish damage in fact, but a court may find ample qualitative support in reliable case law for a higher quantitative standard. n191 Because of the widespread leniency of the evidence required for the amount of damage, there may be certain types of evidence that are less admissible for

issues related to damages in fact, especially for unestablished businesses. n192 On the other hand, the Texas Supreme Court has firmly rejected the "lost chance" damage theory, which is most prevalent in medical malpractice claims for patients with less than a fifty percent chance of survival who then experience a further decrease in life expectancy from an unrelated act of malpractice. n193 Despite the fact that the court acknowledges that more than twenty states presently accept the **[*41]** damage claim in some form while only eight states reject it, n194 it goes on to state that "legal responsibility under the loss of chance doctrine is in reality assigned based on the mere possibility that a tortfeasor's negligence was a cause of the ultimate harm. That damages for loss of chance may be reduced to some degree is ultimately beside the point." n195 Later in this Article, it becomes clear that some damage claims under the ex ante approach may implicitly rely on the lost chance claim.

The opinion in Story Parchment Co. v. Paterson Co., n196 a federal antitrust case concerning damages to an unestablished business, is quoted and cited in many federal and state cases for the recommendation that the admissibility of most evidence should be left to the jury's discretion. n197 Likewise, many opinions have held that issues of an expert's data sources or her methodology should be left to the jury's discretion to accept or reject. n198 Other courts support the trial judge's broad discretion in this area. n199

The Supreme Court's specific holding in Daubert was that the Federal Rules of Evidence supersede the common-law standard that an expert's methodology must be generally accepted. n200 Trial courts were urged to focus on the relevance and reliability of the proposed testimony. n201 Federal Rules of Evidence 402, 702, and 703 **[*42]** are balancing tests for the trial judge's subjective judgment. The effect of the Daubert opinion and its state and federal progeny on the trial judge's discretion is still emerging. The Daubert opinion attempts to assure the parties and the amici that the abandonment of the general acceptance test will not lead to chaos:

Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence... . These conventional devices, rather than wholesale exclusion under an uncompromising "general acceptance" test, are the appropriate safeguards where the basis of scientific testimony meets the standards of Rule 702. n202

While the Daubert decision recognizes these existing safeguards, the decision is interpreted by some to advocate a more active role for the trial judge as gatekeeper for the admission of evidence, with less reliance on the safeguards. n203

On a procedural basis, it seems clear that Daubert and its progeny have had the effect of increasing the uncertainty of what expert opinions will be admitted and have made a Daubert hearing almost a mandatory side-show before or during the trial of a major case. Ironically, one by-product of such Daubert hearings is the need for testimony from an "expert on experts" who can credibly opine on the orthodoxy and rigor of an expert's methodology. n204 Some observers have suggested that courts should appoint an "expert on experts" to testify on the relevance and reliability of expert methodology. n205 It is presently unclear whether the use of ex ante or **[*43]** ex post data will become a basis for a Daubert challenge. n206

A. Case Law Ruling Against Ex Post Data

The strongest holding against the use of ex post data is the Ninth Circuit's holding in Standard Oil Co. of California v. Moore. n207 In that antitrust case, the plaintiff sued for the lost goodwill of his terminated gasoline station business (established), and the trial court refused to admit the valuation opinion of plaintiff's expert, which was based on certain facts and business developments occurring subsequent to the valuation date. n208 The Ninth Circuit affirmed the trial judge's discretion on the issue and then agreed with the court's exclusion of the data by citing two Supreme Court cases, Ithaca Trust Co. v. United States n209 and City of New York v. Sage. n210

Sage was a condemnation case that held that New York City needed to pay only the fair market value of the land

condemned prior to any increases to the market value caused by the news of the condemnation. n211 Ithaca Trust involved an estate tax issue of whether the value of a life estate on the date of the testator's death should be influenced by the subsequent death of the beneficiary. n212 Justice Holmes held that the beneficiary's death was not relevant: "Like all values, as the word is used by the law, it depends largely on more or less certain prophecies of the future; and the value is no less **[*44]** real at that time if later the prophecy turns out false than when it comes out true." n213

The Ninth Circuit's reliance on Ithaca Trust is misplaced. Four years after the Ithaca Trust opinion, Justice Cardozo wrote a unanimous opinion in Sinclair Refining specifically limiting Ithaca Trust to the facts of that case and stating that ex post data is relevant to the measure of damages for a tort or breach of contract:

Ithaca Trust Co. v. United States does not commit us to a different holding. The problem there before the court was one as to the appraisal of a life estate for the purpose of the assessment of a tax. The intention of the lawmakers was held to be that the computation of the tax should be made as of the death of the testator on the basis of a law of averages. A different question would have been here with a different result if we had been measuring the damages for a breach of contract or a tort. To correct uncertain prophecies in such circumstances is not to charge the offender with elements of value non-existent at the time of his offense. It is to bring out and expose to light the elements of value that were there from the beginning. n214

Inexplicably, the Sinclair Refining opinion escaped the attention of the Ninth Circuit in Moore, n215 the First Circuit in Farmington Dowel, n216 and even the Fifth Circuit in Lehrman I n217 and Lehrman II. n218 It was re-introduced to the debate by the Seventh Circuit in Fishman. n219

The Ninth Circuit reiterated its Moore opinion in Simpson v. Union Oil Co. of California, n220 holding that a jury award based solely **[*45]** on evidence of the plaintiff's lost profits was "monstrous" and affirming the district court's grant of a new trial. n221 Less than four months after Simpson was handed down, the Supreme Court reversed the Ninth Circuit on other grounds. n222 The majority opinion was limited to those other grounds, but Justice Black issued a critical concurring opinion that gratuitously advised the Ninth Circuit of his strong disagreement with their view that the plaintiff's lost future profits were insufficient evidence to justify the jury award:

Antitrust damages such as those involved here are bound to be "speculative" and "conjectural" to some extent. When a person wrongfully takes government bonds worth $ 10,000 on the market, the damages can be precisely measured. But when as here a young man's business is wiped out root and branch by a wrongdoer, the measurement of the victim's damages is not so simple a matter. This is true because no one can infallibly predict how long that business would have continued to grow and flourish or precisely how much the business would have been worth to him in 25 years. But certainly a fair and just legal system is not required by difficulties of proof to throw up its hands in despair and leave the sufferer's damage to be borne by him while the person who did the wrong goes scot free. This Court has refused under such circumstances to hold that our system of justice is so helpless to do justice. In this very antitrust field our Court has specifically and pointedly refused to permit antitrust violators to escape liability for their wrongs on the argument that damages must not be awarded because they are uncertain and speculative. n223

The Second Circuit's opinions, applying New York contract **[*46]** law, generally oppose the lost profits method and the use of ex post data. Schonfeld v. Hilliard n224 was a breach of contract dispute over the defendant's alleged failure to fund a new television network to broadcast BBC programming. n225 The court affirmed the trial court's opinion that the plaintiff's claim for lost profits was too speculative, especially for a newly established business. n226 However, it reversed the trial court and held that the plaintiff's claim for loss of value in the venture's business assets, a hybrid damage theory, had merit. n227 These income-producing assets were the BBC contracts, which were valued on the basis of an offer that the would-be network had previously received.

When the defendant's conduct results in the loss of an income-producing asset with an ascertainable market value, the most accurate and immediate measure of damages is the market value of the asset at the time of the breach - not the lost profits that the asset could have produced in the future. n228

The Schonfeld conclusion was on solid ground because the plaintiff's expert could relate the contract's actual market value to a valid and outstanding offer to buy. The assets' market value was not based on profit projections. The Second Circuit stated that New York law holds that losses caused by breach of contract are determined as of the time of breach. n229

In Sharma v. Skaarup Ship Management Corp., n230 the Second Circuit rejected the plaintiffs' damage theory for lost profits resulting from the defendant's breach of an agreement to refinance three vessels. n231 The court held that, under New York law, the measure of such contract damages was the ex ante market value of the vessels on **[*47]** the date of breach. n232 This opinion ignores the possibility that the plaintiff's business had commercial goodwill - that the value of the business exceeded the market value of the net assets. It instructs plaintiffs that if they disagree with profit projections underlying the ex ante valuation, they can hedge the valuation in the market. n233 (How does one hedge a vessel or a BBC contract?) Quoting the New York case of Aroneck v. Atkin, n234 the court rejects ex post data: "New York courts have thus explicitly upheld damage awards based on "what knowledgeable investors anticipated the future conditions and performance would be at the time of the breach' and have rejected awards based on what "the actual economic conditions and performance' were in light of hindsight." n235 Based on New York law, the Second Circuit rejects the use of the lost profits method as well as the ex post approach for cases involving the termination of a business.

In its application of New York contract law in other cases, the Second Circuit has been more flexible. In Lamborn v. Ditmer, n236 a 1989 case for the breach of a partnership agreement in an unestablished securities business, the Second Circuit reversed and remanded the case for other reasons, but approved the expert methodology by which the expert projected the firm's future earnings for the year after the breach and calculated its going concern value using ex post data. n237 In Western Geophysical Co. of America, Inc. v. Bolt Associates, Inc., n238 a 1978 case for breach of an exclusive licensing agreement to an unestablished product, the Second Circuit **[*48]** affirmed the district court's admission of expert testimony that assessed damages to the plaintiff based on the ex post profits of the defendant's subsequent licensing activities, advising that "once the plaintiff has demonstrated that it would have earned profits and has supplied a rational basis upon which those profits can be calculated, it has sustained its burden of proof." n239 Similarly, in Travellers International A.G. v. Trans World Airlines, Inc., n240 a 1994 case for the wrongful termination of a joint venture agreement in an established business under New York law, the Second Circuit affirmed the district court's admission of a lost profits claim based in part on ex post data from the defendant's operation. n241 The Court advised that the plaintiff only needed to show that the lost profits were caused by the defendant's actions, that the damages could be proven with reasonable certainty, and that the particular damages were within the contemplation of the parties at the time the contract was made. n242 At the very least, these latter two cases prove that the practice of partial or quasi-termination is active in New York and perhaps that the interpretation of New York damages law is more art than science.

B. Case Law Supporting Ex Post Data

There are few significant cases that reject the admission of ex post data to assist the trier of fact's determination of lost past profits or lost future profits. Indeed, the "before and after" method is one of the two most accepted methodologies for determining consequential damages. n243 Similarly, it is not unusual for a court to reject a plaintiff's foundation for damages due to the plaintiff's failure to **[*49]** adequately account for the effects of subsequent events. n244 However, such data or information must still be relevant and reliable so that ex post data can be excluded because the time period is not deemed to be comparable. n245

The Eighth Circuit's opinion in Twentieth Century-Fox Film Corp. v. Brookside Theatre Corp. has already been discussed as an example of quasi-termination. n246 The opinion was a strong endorsement of the use of ex post data. n247 The Eighth Circuit later endorsed the lost profits method for antitrust damages in Albrecht v. Herald Co. n248 The trial judge in the Brookside Theatre antitrust suit ruled to admit the testimony from plaintiff's accountant, who examined and summarized the subsequent operating history of the theater under Fox's management from the date of transfer in 1937 to 1950. n249 The Eighth Circuit justified this holding on the basis of Section 910 of the Restatement of Torts, which states that "where there has been interference with a business, events antecedent to the trial may indicate that profits which at the time of the tort were apparently speculative would certainly have been made ... ." n250

The Fifth Circuit has agreed with the Eighth Circuit that both lost profits and the going concern value are appropriate measures of damages for a terminated business. However, the Fifth Circuit **[*50]** appears unwilling to dispute the Ninth Circuit's holding in Moore that ex post data is not admissible in a going concern valuation:

Standard Oil is inapposite here because in that case going concern value not future profits was the measure of damages. The plaintiff, Moore, sought to establish the market value of his goodwill as of August 15, 1952; in that context opinions based on events, facts and business developments occurring subsequent to that date may indeed be irrelevant. But we do not understand that holding to extend to estimates of expenses used to compute future profits. If we did we would expressly disagree. n251

The Seventh Circuit's 1986 opinion in Fishman v. Estate of Wirtz concerned an antitrust claim relating to the sale of the Chicago Bulls basketball team in 1972. n252 As discussed previously, the court confronted the defendant's claim that the damages have to be calculated as of the date that the plaintiff lost his opportunity to buy the team. n253 The court stated that either the lost profits or the going concern method would be suitable. n254 It affirmed the trial court's choice of an ex post, lost profits damages model and rejected the defendants' position that their ex ante, going concern value approach was more appropriate:

Defendants argue that the going-concern value of the Bulls in July 1972 represents a full recovery for IBI because that going-concern value - that is, what a willing buyer given all available information would have paid for the team in 1972 - is by definition a future income stream discounted to present value. The district court's valuation, on the other hand, is based on actual gain experienced by the Bulls over ten years. (The 1972 going-concern value was affected by a number of ex ante predictions, which **[*51]** were proved either true or false and were reflected in the 1982 value). We do not understand defendants' objection to using this adjusted value (which is not speculative) because we know of no case that suggests that a value based on expectation of gain is more relevant and reliable than one derived from actual gain. n255

The opinion's support from the Sinclair Refining and Zenith Radio opinions added great authority to their arguments. n256 Interestingly, the First Circuit ignored the suggestion to adjust the Farmington Dowel framework. More than ten years after the Fishman opinion, the First Circuit handed down its opinion in Coastal Fuels and reiterated the Farmington Dowel framework, n257 despite the fact that it cited the Fishman opinion in a different part of its discussion. n258

The Third Circuit's opinion in Rossi v. Standard Roofing, Inc. n259 voices a strong concern about the relevance of ex ante analysis for damage testimony in antitrust cases. n260 After the Supreme Court's 1977 opinion in Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc., n261 courts required that damages analysis distinguish the antitrust injury from other exogenous factors and even aspects of the violation that do not cause market inefficiency. n262 The Third Circuit concluded:

Hypothetical "but for" calculations usually rely upon unrealistic ex ante assumptions about the business environment, such as assumptions of perfect knowledge of future demand, future prices, and future **[*52]** costs that tend to overstate the plaintiff's damage claim. Thus, using a "but for" damage model arguably makes it impossible for the trier of fact to determine what, if any, injury derived from the defendant's antitrust violations as opposed to other factors, and courts sometimes reject such models as the basis of either causation or amount of injury.

... .

... Rossi makes a strong argument that this estimate took into account the poor general business conditions that existed at the time, as well as any other extrinsic factors not related to the defendants' alleged boycott, because [Rossi's damages expert] based his estimate upon actual sales figures Rossi was able to achieve competing against the same firms, selling the same products at the same location to the same customers under the actual business conditions that existed at the time. n263

The strongest proponent of using ex post data may be the Federal Circuit in its review of patent cases. Its description in Fromson v. Western Litho Plate & Supply Co. n264 of the process of ascertaining a reasonable royalty resembles the appraisal of the fair market value of a private company: "Lacking adequate evidence of an established royalty, the court was left with the judge-created methodology described as "hypothetical negotiations between willing licensor and willing licensee.'" n265 The court describes this methodology as follows:

The methodology encompasses fantasy and flexibility; fantasy because it requires a court to imagine what warring parties would have agreed to as willing negotiators; flexibility because it speaks of negotiations as of the time infringement began, yet **[*53]** permits and often requires a court to look to events and facts that occurred thereafter and that could not have been known to or predicted by the hypothesized negotiators. n266

The Federal Circuit then justified this prescription for using ex post data with extensive quotes from Sinclair Refining. n267

The Connecticut Supreme Court's opinion in Beverly Hills Concepts, Inc. v. Schatz & Schatz n268 provides a useful survey of some other state supreme courts' receptivity to the ex post approach or the use of lost profits to measure the value of a destroyed newly established business. The court advised that:

Lost profits may provide an appropriate measure of damages for the destruction of an unestablished enterprise, and further, ... a flexible approach is best suited to ensuring that new businesses are compensated fully if they suffer damages as a result of a breach of contract, professional malpractice, or similar injuries. n269

The court reversed the trial court's damage awards, holding that the plaintiff's analysis was not sufficiently based in known facts but on speculation. n270 The Connecticut court concluded that the plaintiff's damages evidence was insufficient and substantially less than the evidence that other plaintiffs used to satisfy trial judges in other **[*54]** states. n271

C. The Back Door

Though strong supporters of the ex ante approach, Jeffrey MacIntosh and David Frydenlund admit that in the application of the widespread ex ante approach, Canadian courts do sometimes admit ex post information "as relevant to the determination of damages as of the date of breach." n272 In American courts, the use of ex post data is more prevalent and is frequently required to prove up the case. n273

In the United States, a plaintiff can prove causation by the process of elimination. Financial performance before and after the alleged wrong is compared, adjusting for the effects of any exogenous factors that occur after the wrong, and the plaintiff may claim that the remaining loss of profits can only be explained by the defendant's actions. n274 Alternatively, some courts reject plaintiffs' proof of damages that fail to account for such factors. n275

The burden of distinguishing the effects of independent intervening events from the defendant's actions differs among the **[*55]** jurisdictions. In some states, one of the two parties must carry the burden. In others, the burden shifts back and forth during trial. In most states, the courts expect a damages analysis to be dynamic and anticipate realistic, lawful competitive responses from their adversaries. n276

In cases of fraud or deceptive trade practices, some courts require the plaintiff to show that her damages do not entirely shift the risk of investment or purchase that the plaintiff expected to undertake. In an accounting malpractice case pleaded under the Texas Deceptive Trade Practices Act, the Texas Supreme Court held that the buyer of a company whose financial statements had been greatly misstated was entitled to claim the greater of out-of-pocket or benefit of the bargain damages as of the date of the transaction, as well as consequential damages. n277 The court remanded the case back to the trial judge for the plaintiff to show that the claim for the entire purchase price of the business was justified as consequential damages. n278 The trial court was advised to disallow any attempt of the plaintiff to shift the risk of the purchase price to the defendant. n279 The plaintiff needed to show that the purchased company's eventual bankruptcy was inevitable from the date of purchase and not caused by normal business risks. n280

Sometimes plaintiffs need to explain an embarrassment of riches. What if only a part of the plaintiff's business has been **[*56]** harmed, but thereafter the growth in the remaining lines of business exceeds the damage caused by the defendant? To forestall the defense claim that there was no proof of the fact of damage because the plaintiff's profits increased after the wrong occurred, the plaintiff's expert needs to be able to sort out the company's ex post financial data and isolate the marginal effect of the wrong. n281 The Fifth Circuit argues that the lost profits method is best for determining damages from the partial termination of a business because it can distinguish between profits lost from actions of the defendant and profits lost or gained otherwise. n282

Finally, a likely source of leakage of actual events into a courtroom is through the experience of the jurors. Many state courts welcome the jurors' competent use of their personal information; some do not. The First Circuit states that under the state case law, a jury is not bound by acceptable expert evidence. n283 It even seems doubtful that a court could actually restrict a jury from using its knowledge of ex post macroeconomic trends. Regardless of the trial judge's instructions, how many jurors will be able to listen to economic projections for 2001 and 2002 without wondering about the actual effect of the World Trade Center tragedy? How much credibility would an expert lose by failing to address the issue?

IV. The State of Industry Practice

In weighing the admissibility of expert opinion, trial judges consider whether the evidence in question is considered relevant and reliable in actual industry practice. n284 Under the Federal Rules of **[*57]** Evidence, an expert may base her opinion on evidence that would otherwise be inadmissible if it can be shown that the review of such evidence is considered normal industry practice. n285 Unfortunately, actual practitioners of valuation practices, such as investment bankers and business brokers, do not write many articles, especially articles about the relevance or reliability of ex post data. n286 We therefore rely on the economists who study such valuation practices.

Many economists and other scholars are interested in how our litigation system assesses damages for plaintiffs whose claims are subject to above-average risk, especially claims that have outcomes with a significant chance of loss. How does the litigation process take the risk of a plaintiff's lost opportunities into account? How well does the system restore the non-breaching party to her expectations or restore the tort victim to what her position would be without the tort?

Some economists conclude that the ex post approach is biased when the plaintiff's claim has a significant element of negative damages. When a damages expert considers the value of a terminated business enterprise, she must consider all of the possible outcomes for that enterprise. Risky enterprises commonly involve negative individual outcomes. In other words, the plaintiff might have lost money in the enterprise, and her "damages" would have been negative. However, the weighted average of the probability distribution of the business's potential outcomes could still be significantly positive and warrant filing suit.

On an ex post basis, such a plaintiff would continue her claim only if her actual damages were positive. Otherwise, the claim would be withdrawn. In comparison, the ex ante method would allow some plaintiffs to claim damages even if they might not have actually incurred positive damages. The ex post method is therefore alleged to be upwardly biased, because plaintiffs with actual **[*58]** "negative damages" would be excluded, thus raising the average claim for a plaintiff under the ex post method.

Such a conclusion of bias, however, requires a large number of simplifying assumptions about the parties and the legal process. The earliest version of the current model hypothesized the following:

(1) The contract is breached at time 0;

(2) The project would have required an investment of $ 1,000 at time 1;

(3) At time 2, it is equally likely that the project will generate $ 500 or $ 3,000;

(4) There is no forecasting error in assumption (3) between expected and realized events; i.e., half the time the project actually generates one or the other possible outcome;

(5) The non-breaching party files a complaint at time 1; and

(6) There will be no transaction costs. n287

On a non-discounted basis, the ex ante approach would project that the non-breaching party would experience a $ 500 loss or a $ 2,000 profit with an expected profit of $ 750. n288 Alternatively, the ex post approach would report lost profits of $ 2,000 for half of the cases, and the other half of the cases would be withdrawn. n289 Thus, on average, plaintiffs that use the ex post approach can expect to enjoy $ 1,000 in damages, a premium or "bias" of $ 250 for the time perspective. n290 Franklin Fisher and R. Craig Romaine summarize the bias as follows: "Giving the plaintiff the

lost profits that hindsight suggests does not place it in the position it would have occupied without the violation; it replaces an uncertain world with a particular **[*59]** outcome." n291

While the model fails to adequately mirror the litigation process, it also suffers from two internal problems. First, it ignores the possibility that an unestablished or young business may need the extra time to prove the non-speculative nature of its lost profits. n292 An inexperienced management team with a new technology faces an uphill battle without evidence of specific contracts to shore up profit projections. Second, the model's assumption that lost profits must be calculated as of the date of wrong is generally inappropriate for consequential damages. n293 The comparative bias of the two methods depends on the appropriate reference date. With the date of trial as the reference point, the ex ante method shows a negative bias because it includes projections that are irrelevant as of the date of trial.

More fundamentally, the model assumes away the principal issue: the risk that ex ante projections are more likely to be inaccurate because they are not subject to correction by actual events. It is not unduly cynical to believe that a comparison of ex ante and ex post damages would favor ex post and that, even absent direct proof of projection bias for the ex ante method, ex post analysis will have substantially less variance and therefore less risk. As for projections of profits beyond the date of trial, the ex post projections would be less speculative because their assumptions are subject to corroboration by actual events. Second, by suggesting that a plaintiff might pursue a lawsuit through to trial on the basis of ex ante projections when she actually lost money, the model ignores the plaintiff's requirement to prove the fact of damages with reasonable certainty. Continuing the suit after the plaintiff knew that she actually did not lose profits would likely fail for the plaintiff's inability to demonstrate the fact of damages.

[*60] When the assumption for perfect forecasting is relaxed, the ex ante approach reveals an additional bias. If a plaintiff decides against filing a complaint based on expected damages at the time that the wrong is inflicted, actual business conditions subsequent to that decision could exceed projections and substantiate damages. The ex ante method can thereby discourage those plaintiffs who initially believe that they have negative damages but, in actuality, have significantly positive ones.

The model's authors allege that the plaintiff's opportunity to withdraw her claim under the ex post method provides the plaintiff with an unfair option of significant value:

A damage award based on the known outcome gives the damaged plaintiff a valuable option, namely, the opportunity to choose whether or not to litigate. In order to base damage compensation on known outcomes without unjustly enriching the plaintiff, we must adjust the damage award downward by an amount equivalent to the value of the option created by the ex post approach. n294

It seems difficult to understand the unfairness, if any. Presumably, the defendant has been found liable and now objects that the plaintiff can decide whether or not to pursue the suit. n295 Absent this valuable option, the defendant would incur litigation costs while being sued by a plaintiff who has incurred negative damages. Under the ex ante method, however, this claim is represented as positive damages because it was expected at the time of the wrong. The need for judicial economy alone should be sufficient to obviate the "fairness" of this possibility.

In cases in which the plaintiff's outcome distribution has a significant chance of a negative outcome, the plaintiff can still press her case by employing the real options approach to her damages. The value of an opportunity to pursue a business enterprise is always greater than or equal to zero. Dobbs discusses this type of claim in **[*61]** an analogy of a lottery. n296 On an ex ante basis, this damage claim would require the use of the "lost chance" claim discussed previously if the ex ante chance of a negative outcome is fifty percent or more. Of course, the use of ex post data could preclude the need to claim a lost chance.

Finally, when considering the facts that (1) litigation is very expensive, (2) the courts are concerned that plaintiffs

bear their agreed business risks, and (3) litigation is a risky process for all parties, the comparison totally fails. Consider a hypothetical where 365 people enter a lottery to pick the date in the next year on which a certain website will experience the largest number of hits. Each person commits to a different date and sends in a dollar in the hopes of winning the $ 730 prize. The lottery operator wrongfully terminates the lottery and returns the money before the start of the New Year. In a world where litigation is expensive and risky, few of the would-be plaintiffs would sue for their ex ante expected profit of $ 1, especially when the likelihood of a profit is less than 1%. On the other hand, under an ex post basis, the one person who picked the correct date can pursue her claim for $ 729. The outcome for the defendant is very different: under the ex ante approach, she could lose $ 365 as opposed to $ 729 under the ex post approach.

The Patell negative damages model sets off an interesting debate about how the two approaches deal with the plaintiff's risk of otherwise profiting from her enterprise absent the defendant's wrong. Fisher and Romaine claim that the ex post method improves the plaintiff's ex ante position because it "replaces an uncertain world with a particular outcome." n297 It is alleged that sometimes the plaintiff has an incentive to give up her enterprise in the hopes of achieving a better or less risky outcome in litigation. n298 Taurman and Bodington respond by arguing that the plaintiff, at worst, is merely replacing the risk of the business outcome with the risk and added expense of the litigation structure. n299 On the other hand, damages are always subject to the jury's perception of the foreseeability of the damages, which is "established by proof that the actor, as a person of ordinary intelligence and prudence should have anticipated the **[*62]** danger to others [by his act]. The rule does not require that he anticipate just how injuries will grow out of the situation." n300

The negative damages model was further developed by MacIntosh and Frydenlund, who were concerned that the ex post method of damages analysis can show a similar bias relating to the plaintiff's duty to mitigate damages. n301 It is widely agreed that while the plaintiff has a duty to mitigate damages, she is also entitled to seek reimbursement for the reasonable expenses of the mitigation efforts. n302 In cases where the plaintiff operates under "risky" conditions, she may have an incentive to take risky mitigation actions that will only pay off well enough to exceed all of her damages; otherwise, her mitigation efforts only benefit the defendant. n303 This "moral hazard" for the plaintiff is compounded by the authors' conclusion that the defendant's ability to enforce the plaintiff's duty is somewhat limited. n304 They therefore conclude that, under the assumptions of their model, "the non-breacher [will] adopt an inefficient high-risk mitigation strategy." n305

On the other hand, when their artificial assumptions are relaxed, the risk of economic inefficiency subsides. When the model is free to incorporate the facts that information is not free or perfect and that litigation is risky and costly, the use of the ex post damages approach is found to be fairly satisfactory: "An ex post rule, by comparison, economizes on information costs and the use of judicial resources: as long as the mitigation strategy adopted falls within a broadly defined band of acceptable business judgment, the results of the mitigation may be used to effect the computation of damages." n306

The most recent version of the negative damages model comes from William Tye, Stephen Kalos, and A. Lawrence Kolbe, who make a fair comparison of ex ante and ex post methods. n307 The **[*63]** model and analysis are essentially the same as other versions, except that the analysis is considered under the going concern value for a terminated business. n308 Three possible outcomes are offered, including a negative outcome that has a probability of less than 50%. n309 They conclude that the ex post approach should generate a higher damages claim at trial because the "asymmetry in the litigation process" redistributes a greater amount of expected damages as compared to actual damages and eliminates the plaintiffs with negative damages. n310 The lottery hypothetical previously discussed is a good example of that redistribution effect. Tye, Kalos, and Kolbe offer an interesting comparison when the assumption of perfect forecasting is relaxed: "While the ex ante approach clearly has some attractive theoretical properties, the chief complaint about the ex ante approach is its susceptibility to overly optimistic projections, which are likely to be exposed in the sober light of actual experience." n311 On the other hand, the authors gave their readers fair warning at the beginning of the article by quoting Taurman and Bodington:

Only a wholesale revolution in how cases are tried and decided would close the gap between the realities of litigation and strict adherence to finance theory. It is doubtful that the gap is worth closing. Despite its acknowledged force in the valuation of business opportunities, finance theory has only a meager claim as the model for resolving disputes about what might have been. n312

V. Is the Jury Still Awake ?

Numerous authors decry how the jury is delegated the duty of **[*64]** assessing damages. They contend that the jury is given inadequate guidance and excessive freedom and discretion. n313 As previously mentioned, many states specifically permit the jury to consider their own personal experiences in undertaking their duties. n314 Is this laissez faire attitude consistent with the courts' gatekeeper role? A brief review of many analyses of jury behavior indicates that a juror's need for simplification and adequate perspective may drive the juror to extend more credibility to the expert who communicates clearly and simply than to the expert with superior substance. Of course, those same studies indicate that a large percentage of jurors do not believe much of what "hired gun" experts assert. n315

There is also interesting research about how the fundamental difference between the ex ante and ex post approaches can create a bias in jury perception for liability issues:

It is important to distinguish between probabilities and consequences. The probability of an event is the likelihood that it will occur; the payoff refers to the magnitude of its consequences. However, under many conditions, people seem to confuse the two components. For example, large losses can affect the perceptions of the preventability of an accident. However, the existence of substantial ex post losses does not imply that the ex ante probability was high or that this probability was easy (or difficult) to manipulate through preventative actions. n316

More specifically, in some controlled experiments, Kim Kamin and Jeffrey Rachlinski have found that "outcome knowledge deeply affected the participants' interpretations of a complex story. A majority of participants randomly assigned to the hindsight condition judged the choice made by over three quarters of the foresight **[*65]** participants to be negligent." n317

Thus, using the same description of the facts for both groups, 75% of the foresight group concluded that a certain precaution was unnecessary, but more than 50% of the hindsight group found the failure to use such precaution negligent based on the same facts supplied to the foresight group. n318

Can this conclusion be extended to theorize that ex post damage estimates are more credible to jurors than ex ante analyses? Lost past profits based on ex post data damages have the added benefit of being simpler to explain and are immune from attacks of being speculative. Defense litigators, however, may sometimes be reluctant to use the ex post approach out of their concern that discussing damages at all gives greater credence to the issue of liability. n319 Certainly, discussing actual outcomes in hindsight could heighten this concern and interfere with the defendant's issues regarding the non-foreseeability of the impact of the defendant's actions.

VI. Ex Post Is a Dominant "Game" Strategy for Plaintiffs

Assume that you represent a plaintiff that incurred business damages. In that jurisdiction, the ex ante and ex post approaches are regarded as equally viable for all forms of consequential damage methods. Two different testifying experts are available to work on your case; they will do everything else the same, but one uses the ex ante approach and the other uses the ex post approach. You know that your opponent generally avails herself of the same two alternatives, but she makes her final selection only after your expert has filed her report.

I submit that there are two major reasons why the plaintiff should pick the ex post expert without any knowledge of how the plaintiff's enterprise will perform after the date of the wrong. The first concern will be client relations. Clients are almost always more **[*66]** optimistic than the testifying expert. Choosing the ex post approach will give the client time for her more optimistic expectations to be borne out and to thereby minimize the penalty that a business client generally must sacrifice by being compensated according to objective or "reasonable" expectations.

The second reason relates to the game diagram below, which assumes that the impact of choosing the ex ante or ex post approach is not dependent on any other choices like going concern or lost profits methodology. The top row indicates circumstances in which the actual results bear out greater damages than otherwise objectively projectable at the time of the wrong. The second row indicates circumstances in which the actual results reveal smaller damages than projected. The first column represents circumstances in which the plaintiff chooses the ex post approach, and the second column represents those in which the plaintiff chooses the ex ante method.

The game is to predict which approach the defendant would select after knowing the plaintiff's choice and how the business is actually performing compared to ex ante projections. Starting with the box on the lower left, when the plaintiff chooses the ex post method and the actual results underperform the projections, the defendant would choose the ex post method; otherwise the defendant's expert would generate higher damages than the plaintiff's. Similarly, in the upper right hand box, if the plaintiff chooses the ex ante approach and actual results outperform expectations, the defendant would choose the ex ante method for the same reason.

[*67]

[SEE TABLE IN ORIGINAL]

It should be clear that the defendant would choose a different approach to that of the plaintiff only in the remaining two boxes. Which risk would you rather run between the two alternatives:

(1) To claim higher damages than the defendant when the actual results exceed projections; or

(2) To claim higher damages than the defendant when the actual results fail to justify the projections?

Both situations are theoretically defensible, but I suspect that most litigators would prefer the first situation over the second. It maximizes credibility and simplicity of presentation; therefore, using the ex post approach is a dominant strategy.

VII. Conclusion

Under most circumstances, the calculation of consequential damages to business will require some form of profit projections, whether they are used to calculate lost profits or going concern value. Few cases are immune to the risks of uncertain prophecies. State and federal jurisdictions differ on what data can be used to form the projections. It has been shown that, unfortunately, much of this variation can be attributed to various courts' failure to understand that most valuation is based on projections and to a residual hangover of the trover legacy in common law.

[*68] The widespread use of ex post data in valuation and damages analysis could offer some discipline and credibility to the estimation of fair market value. However, the use of ex post data also could be abused in such a way as to calculate what market value should be rather than what it would have been. Especially for cases that experience a long delay in reaching a jury verdict, the hybrid method of claiming lost profits through the trial date and going concern value thereafter deserves further investigation.

Due to the arbitrary distinctions made by some courts about when ex post data can be considered, the lost profits approach can exceed the going concern value for a total destruction claim, even if the lost profits claim is only for partial termination. Each combination of all options needs to be evaluated for allowable damages in light of the case law in that jurisdiction. The legal and quantitative analyses need to be coordinated, especially in regard to issues of discovery requirements, legal research, and damages estimates. Those litigation teams that bring in damage experts late in the process will find that they have possibly lost valuable strategic alternatives.

Case law endorses both the ex ante and ex post approaches with certain jurisdictional outliers. For all of its theoretical purity, the ex ante approach suffers from complexity, risk of bias, and unrealism. The approach is vulnerable to the actual data that one's opposition can bring in through the front door or that can otherwise enter the courtroom through the back door. While economists heatedly argue one model versus the other, most agree that both ex post and ex ante are generally acceptable and widely used.

Legal Topics:

For related research and practice materials, see the following legal topics:
Education LawInstructionExtracurricular ActivitiesPublicationsTortsBusiness TortsGeneral OverviewTortsIntentional TortsConversionElements

FOOTNOTES:

n1. Andrew Smithers & Stephen Wright, Valuing Wall Street 9-19 (2000) (showing also that the ratio has risen dramatically over the last ten years).

n2. Robert F. Reilly & Robert P. Schweihs, Valuing Intangible Assets 8-9 (1999).

n3. For two distinct, but not unique, examples of the occasional disrepute, see Fishman v. Estate of Wirtz, 807 F.2d 520, 579 (7th Cir. 1986) ("Computations of value based on cash flows are notoriously malleable; we have mocked them because of their imprecision.") (citation omitted) (Easterbrook, J., dissenting), and Olympia Equip. Leasing Co. v. W. Union Tel. Co., 797 F.2d 370, 382 (7th Cir. 1986), which states:

It is thus one more example of the old problem of expert witnesses who are "often the mere paid advocates or partisans of those who employ and pay them, as much so as the attorneys who conduct the suit. There is hardly anything, not palpably absurd on its face, that cannot now be proved by some so-called "experts."'

Id. (quoting Keegan v. Minneapolis & St. Louis R.R., 78 N.W. 965, 966 (Minn. 1899)).

n4. 509 U.S. 579 (1993).

n5. Stuart C. Gilson et al., Valuation of Bankrupt Firms, 13 Rev. Fin. Stud. 43 (2000). The data sample related to sixty-three companies that emerged from bankruptcy between 1984 and 1993. Id. at 46. The stock of all sixty-three was publicly traded after the company emerged from bankruptcy, including thirty-nine companies whose stock was traded continuously throughout the bankruptcy period. Id. at 48, 60. The post-bankruptcy market value of each company was compared to value implied by the reorganization plan. The ratio of estimated value to market value ranged from 20% to more than 250%. Id. at 44. Regression analysis indicated a significant relationship with factors such as whether management was granted significant stock options or whether an outside party provided new equity investment. Id. at 45-46.

n6. See infra Part III.A-B.

n7. See infra notes 287-91 and accompanying text.

n8. 1 Dan B. Dobbs, Law of Remedies 3.2, 5.13(1) (2d ed. 1993).

n9. Id. 3.2.

n10. Id. 3.3(4).

n11. Id.

n12. See id. 3.3(3) (explaining that market damages are calculated on the date when performance was due, the date of the harm, or the date the buyer-plaintiff learned of the breach under theories of contract, tort, and the UCC, respectively).

n13. Restatement (Second) of Torts 910 cmt. b (1977); see, e.g., Unisource Worldwide, Inc. v. S. Cent. Ala. Supply, L.L.C., 199 F. Supp. 2d 1194, 1212 (M.D. Ala. 2001) (explaining that in an action for breach of contract, plaintiff's consequential damages would be calculated by determining profits lost to date of trial).

However, exceptions abound. Under Texas law, general or direct damages are to be calculated as of the date of the fraud. Arthur Andersen & Co. v. Perry Equip. Corp., 945 S.W.2d 812, 817 (Tex. 1997). Damages for conversion are generally determined by the market value of the converted property on the date of conversion, unless the conversion is willful, in which case the damages are equal to the highest market price between the date of conversion and filing of the suit. Miller v. Kendall, 804 S.W.2d 933, 942 (Tex. App. - Houston [1st Dist.] 1990, no writ). But see United Mobile Networks, L.P. v. Deaton, 939 S.W.2d 146, 148 (Tex. 1997) ("A conversion should not unjustly enrich either the wrongdoer or the complaining party.") (citing Groves v. Hanks, 546 S.W.2d 638, 648 (Tex. Civ. App. - Corpus Christi 1977, writ ref'd n.r.e.).

n14. For an example of a claim for consequential damages that was rejected as too far-fetched, see Stuart v. Bayless, 964 S.W.2d 920, 921 (Tex. 1998) ("It would be a rare case in which an attorney or law firm could demonstrate that the failure of a client to pay its bills gave rise to a recovery of contingent fees that might have been earned from other clients.").

n15. Tex. R. Civ. P. 56; see also Jeffrey R. Cagle et al., The Classification of General and Special Damages for Pleading Purposes in Texas, 51 Baylor L. Rev. 629, 641 (1999) ("To recover lost profit damages that are reasonably foreseeable, the plaintiff must plead the special damages with specificity."). But see Andra Renee St. Julien, Lost Profits Resulting From Tortious Injuries to Business, 26 Am. Jur. 3d Proof of Facts 6 (1994) ("Lost profits arising from a breach of contract need not be specifically pled.").

n16. Generally, the foreseeability of the damages is only at issue for special or consequential damages. Am. Bank v. Thompson, 660 S.W.2d 831, 834 (Tex. App. - Waco 1983, writ ref'd n.r.e.).

n17. See generally Todd R. Smyth, Annotation, Recovery of Anticipated Lost Profits of New Business: Post-1965 Cases, 55 A.L.R. 4th 507 (1987) (demonstrating that the majority of jurisdictions have departed from common law and now follow a rule whereby new or unestablished businesses can recover damages for lost profits if they can be proved with reasonable certainty).

n18. See T. Sedgwick, A Treatise on the Measure of Damages 244 (9th ed. 1913) ("The principle on which the rule rests is the indemnification of the injured party for the injury which he has sustained. A complete indemnity requires that the vendee should receive the sum which, with the price he agreed to pay, would enable him to buy the article which the vendor had failed to deliver.").

n19. See, e.g., 11 Samuel Williston & Walter H.E. Jaeger, Williston on Contracts 1138 (3d ed. 1968) ("The general purpose of the law is, and should be, to give compensation, that is, to put the plaintiff in as good a

position as he would have been in had the defendant kept his contract.").

n20. See, e.g., U.C.C. 2-715 (2001) (setting forth the provisions for cover).

n21. Robert E. Goodin, Theories of Compensation, 9 Oxford J. of Legal Stud. 56, 60 (1989). See generally Konrad Bonsack, Damages Assessment, Janis Joplin's Yearbook, and the Pie-Powder Court, 13 Geo. Mason L. Rev. 1 (1990) (tracing the evolution of the common law of compensatory damages and the use of ex post data).

n22. Restatement (Second) of Contracts 347 (1981) (citing Restatement (Second) of Torts 911 (1977)). See Charles T. McCormick, Handbook on the Law of Damages 45, at 171 (1935) (stating that the injured party has a right to damages based on his expectation interest, measured in relevant part by the loss in value to him of the other party's performance); see also Note, Private Treble Damage Antitrust Suits: Measures of Damages for Destruction of All or Part of a Business, 80 Harv. L. Rev. 1566, 1581 (1967) ("And prevailing market values may not reflect the profit potential accurately - industry-wide restraint on competition or other factors may distort market values.").

n23. Crisp v. Sec. Nat'l Ins. Co., 369 S.W.2d 326, 328-29 (Tex. 1963); Williams v. Dodson, 976 S.W.2d 861, 864-65 (Tex. App. - Austin 1998, no pet.).

n24. Shannon P. Pratt et al., Valuing A Business 544 (3rd ed. 1996) (defining different standards of values). For the purposes of simplification, the owner's personal risk and tax characteristics, among other factors, are ignored in what would otherwise also distinguish market value from the business's investment or use value to the owner.

n25. This assumes that the business is well established. Otherwise, such a plaintiff might experience the double injury of the defendant's claims that the plaintiff's lost profit projections are too speculative and that the use of ex post data, evidence of the plaintiff's actual experience, is not admissible.

n26. See Kay v. First Cont'l Trading, Inc., 976 F. Supp. 772, 776 (N.D. Ill. 1997) (criticizing the expert witnesses' failure to discount the lost future earnings for any accountable risks involved).

n27. 289 U.S. 689 (1933).

n28. Id. at 699 (citations omitted).

n29. See, e.g., In re Marriage of Cutler, No. 98-D-516, 2002 WL 31379936, at 5 (Ill. App. Ct. Oct. 22, 2002) (explaining that market approach calculation is based on "the assumption of a hypothetical sale of the business"); Alper v. Altheimer & Gray, No. 59-1, 2002 WL 31133287, at 24 (N.D. Ill. Sept. 26, 2002) (discussing the quantification of "projected sales and related expenses" when calculating lost profits).

n30. See, e.g., In re Marriage of Cutler, 2002 WL 31379936, at 4 (describing differences in valuation under each of the three methods). The three approaches may be applied separately to each enterprise of a larger, multi-enterprise company; thus, for multi-enterprise companies, an appraiser may combine the methods in determining the business's value. Furthermore, business appraisers may also render their opinion based on a weighted average of more than one approach.

n31. For the purposes of this Article, the term "profit" refers to cash flow net of investment required to achieve the projected revenue and growth.

n32. This is not to say that the Asset Approach is insignificant. See Douglas Laycock, The Remedies Issues: Compensating Damages, Specific Performance, Punitive Damages, Supersedeas Bonds and Abstention, 9 Rev. Litig. 473, 475-477 (1990) (explaining how Pennzoil's damage claim against Texaco for $ 7.5 billion of compensating damages was calculated according to the asset or replacement cost method).

n33. Aswath Damodoran, The Dark Side of Valuation 262 (2001).

n34. See Patrick A. Gaughan, Measuring Commercial Damages 54-56 (2000) (illustrating graphically the different methods of profit forecasting); Richard A. Brealey & Stewart C. Meyers, Principles of Corporate Finance, 59-62 (5th ed. 1996) (describing the procedure for determining the present and future value of common stocks).

n35. See A. Corbin, Contracts 1024 (1964) (suggesting that damages be limited to ten years of lost future

profits). But see America's Favorite Chicken Co. v. Samaras, 929 S.W.2d. 617, 629 (Tex. App. - San Antonio 1996, n.w.h.) (affirming factual sufficiency for damages based on twenty years of lost profits and residual value).

n36. Beverly Hills Concepts, Inc. v. Schatz & Schatz, 717 A.2d 724, 739 (Conn. 1998).

n37. Arnott v. Am. Oil Co., 609 F.2d 873, 887 (8th Cir. 1979) (acknowledging short-term lease, but explaining that the jury could properly infer Arnott's long-term expectations based on profit projections, company custom, and the practice of renewals). But see Martin v. U-Haul Co. of Fresno, 251 Cal. Rptr. 17, 27 (Ct. App. 1988) (limiting damages to the period specified by contract); Hentze v. Unverfehrt, 604 N.E.2d 536, 540 (Ill. App. Ct. 1992) (limiting calculation of damages for lost profits to the number of days notice required to terminate contract); Keystone Floor Products Co. v. Beattie Mfg. Co., 432 F.Supp. 869, 879 (E.D. Pa. 1977) (limiting damages for lost profits to provable lost sales).

n38. Lehrman v. Gulf Oil Corp., 464 F.2d 26, 47 (5th Cir. 1972).

n39. Exxon Pipeline Co. v. Hill, 788 So. 2d 1154, 1163 (La. 2001).

n40. Damodoran, supra note 33, at 220.

n41. EBITDA stands for earnings before interest, taxes, depreciation, and amortization and acts as a proxy for operating cash flow.

n42. See Lamborn v. Dittmer, 873 F.2d 522, 533-34 (2d Cir. 1989) (exemplifying how the approach is properly applied); see also Pratt et al., supra note 24, at 225 ("Therefore, to make an intelligent estimate of what multiple is appropriate for the subject company relative to the multiples observed for the guideline companies, the analyst must make some judgments as to the relative risk and growth prospects of the subject compared with the guideline companies.").

n43. Edmunds v. Sanders, 2 S.W.3d 697, 705 (Tex. App. - El Paso 1999, pet. denied) (holding that it was incorrect for the expert to base "his lost profit calculation on average percentage profits for similar businesses as

shown in the Robert Morris and Associates and Prentice Hall manuals"). But see Helena Chem. Co. v. Wilkins, 47 S.W.3d 486, 505 (Tex. 2001) (approving damage calculation for lost crops based on the average yield for sorghum growers).

n44. Damodoran, supra note 33, at 197.

n45. Galveston, Harrisburg & San Antonio Co. v. Texas, 210 U.S. 217, 227 (1908) (emphasis added).

n46. Reilly & Schweihs, supra note 2, at 383.

n47. Smithers & Wright, supra note 1, at 317-18.

n48. For example, the S&P ratio of market value to book value is about 550%, and Smither's "q ratio" is 210% for an average of 513% after an adjustment for a control premium of 35%. Tangible net worth would then amount to 100%/513%, or 19.5%. For further discussion on the ratio of market-to-book values, see Baruch Lev, Intangibles 8-9 (2001) ("The mean market-to-book ratio of the Standard and Poor (S&P) 500 companies (among the largest 500 companies in the United States) has continuously increased since the early 1980s, reaching the value of <diff>6.0 in March 2001. This suggests that of every six dollars of market value, only one dollar appears on the balance sheet, while the remaining five dollars represent intangible assets."). For general reference regarding control premiums, see Shannon P. Pratt, Business Valuation Discounts and Premiums 17-44 (2001); George P. Roach, Control Premiums and Strategic Mergers, 17 Bus. Valuation Rev. 42, 42-49 (1998).

n49. For further discussion concerning the possible confusion among value, lost profits, and goodwill, see Kenneth M. Kolaski & Mark Kuga, Measuring Commercial Damages via Lost Profits or Loss of Business Value: Are These Measures Redundant or Distinguishable?, 18 J. L. & Com. 1 (1998).

n50. See, e.g., Story Parchment Co. v. Paterson Parchment Paper Co., 282 U.S. 555 (1931) (holding that if there are other elements of damages such as declines in assets' values, awards are made for them); Standard Oil Co. of Cal. v. Moore, 251 F.2d 188, 219-20 (9th Cir. 1959) (stating that appropriate factors to consider when measuring the value of the good will are what profit the business made over and above an amount fairly attributable to the return on investment and labor to owner and the reasonable prospect that the additional profit will continue into the future), cert. denied, 356 U.S. 975 (1958); Kestenbaum v. Falstaff Brewing Corp., 575 F.2d 564, 573-74 (5th Cir. 1978) (requiring strict adherence to the widely approved elements of goodwill to

ensure adequate support and prevent double recovery); Mead v. Johnson Group, Inc., 615 S.W.2d 685, 690 (Tex. 1981) (holding that loss of credit reputation was an appropriate consequential damage). See generally Richard R. Rulon, Proof of Damages for Damaged or Precluded Plaintiffs, 49 Antitrust L.J. 153, 158 (1980) (discussing the interchangeability of goodwill and going concern value in some courts).

n51. 1 Dobbs, supra note 8, 3.3(4).

n52. William A. Cerillo, Proving Business Damages 130 (2d ed. 1991) ("Lost profits are recoverable in business tort cases. Indeed, lost profits are frequently the most common item of recovery in business disputes.").

n53. Checker Bag Co. v. Washington, 27 S.W.3d 625, 641 (Tex. App. - Waco 2000, pet. denied) (advising that a plaintiff could recover for both lost past profits and injury to business reputation if the damages cover different time periods).

n54. See, e.g., Sandare Chem. Co. v. WAKO Int'l, Inc., 820 S.W.2d 21, 23 (Tex. App. - Ft. Worth 1991, no writ) (holding that if the plaintiff cannot sustain the burden of proof to show his lost profits in a tortious interference case, unjust enrichment is a valid measure of damages); Arabesque Studios, Inc. v. Academy of Fine Arts, Int'l, Inc., 529 S.W.2d 564, 569 (Tex. Civ. App. - Dallas 1975, no writ) (holding that the new employer's profits could be used to measure damages for a prior employer's damages in the case of an employee's breach of covenant to not compete).

n55. See, e.g., Checker Bag Co., 27 S.W.3d at 639 (affirming jury damage award based on testimony of hypothetical "but for" profits and evidence of actual past profits).

n56. There are many cases in which the precise issue of the use of ex post data was not specifically at issue, but the court's opinion approved of damages methodology that included the use of ex post data to calculate lost profits. See, e.g., Pen<tild n>a v. Ludwig, 766 S.W.2d 298, 302 (Tex. App. - Waco 1989, no writ); White v. Southwestern Bell Tel. Co., 651 S.W.2d 260, 262 (Tex. 1983); Tex. Instruments, Inc. v. Teletron Energy Mgmt., 877 S.W.2d 276, 280 (Tex. 1994) (citing Pace Corp. v. Jackson, 155 Tex. 179, 191 (1955)).

n57. See generally Philip Eden et al., Forensic Economics-Valuation of Businesses and Business Losses, 16 Am. Jur. 2d Proof of Facts 17, at 301 (listing five possible calculation dates to establish damage comparisons).

n58. See, e.g., City of San Antonio v. Guidry, 801 S.W.2d 142, 150 (Tex. App. - San Antonio 1990, no writ.).

n59. See Kolaski & Kuga, supra note 49, at 16; Albrecht v. Herald Co., 452 F.2d 124, 130-31 (8th Cir. 1971) (holding that lost profits from the cessation of business to the time of trial could not be awarded in addition to going concern value), mandamus denied, 405 U.S. 1063 (1972); Green v. Gen. Foods, 517 F.2d 635, 663 (5th Cir. 1975) (stating that a plaintiff may not recover both lost future profits and the going concern value of a business destroyed by an antitrust violation); Guidry, 801 S.W.2d at 150) (disallowing as double recovery the lost profits and the loss in value of the business during the same time period); Checker Bag Co., 27 S.W.3d at 641 ("Business reputation or "goodwill' is usually considered to be a part of the value of the business. The ability of the business to make a profit is reflected in its value. Thus, the recovery of both lost profits and damage to business reputation could easily be duplicative.") (citations omitted).

n60. 273 U.S. 359 (1927).

n61. 111 F. 96 (8th Cir. 1901).

n62. Eastman Kodak, 273 U.S. at 377.

n63. Cent. Coal, 111 F. at 98; cf. Helena Chem. Co. v. Wilkins, 47 S.W.3d 486, 505 (Tex. 2001) ("However, lack of a profit history does not, by itself, preclude a new business from recovering lost future profits... . This can be accomplished with a profit history or some other objective data, such as future contracts, from which lost profits can be calculated with reasonable certainty.") (citation omitted).

n64. See e.g., Mattingly, Inc. v. Beatrice Foods Co., 835 F.2d 1547, 1559 (10th Cir. 1987) (declaring the proper measure of damages to be the "difference between the market value of the business before and after the injury") (quoting Sawyer, 630 S.W.2d. at 874) (emphasis omitted); Standard Oil Co. of Cal. v. Moore, 251 F.2d 188, 219 (5th Cir. 1957) (noting that the plaintiff asked for the measure of damages to be based on the market value of the business on the date of the injury); Taylor v. B. Heller & Co., 364 F.2d 608, 612 (6th Cir. 1966) (stating that Ohio recognizes an action for damages based on the differences between the value before and after the destruction or injury).

n65. 630 S.W.2d 872 (Tex. App. - Fort Worth 1982, no writ).

n66. Id. at 874 (quoting 25 C.J.S. Damages 44 (1966)).

n67. Sawyer, 630 S.W.2d at 876; see also Gonzalez v. Gutierrez, 694 S.W.2d 384, 390 (Tex. App. - San Antonio 1985, no writ) ("Where the result of the interference is to put the plaintiff out of business it has been said that his damages are the difference between the value of his business in the absence of the interference and the amount realized by liquidation.") (citing 45 Am. Jur. 2d Interference 58 (1969)).

n68. See Sawyer, 630 S.W.2d at 874 (finding lost profits appropriate in cases of partial destruction of property) (citing Aetna Life & Cas. Co. v. Little, 384 So. 2d 213, 216 (Fla. App. 1980)); Taylor, 364 F.2d at 612 (stating that Ohio case law allows damages for future profits that are reasonably certain) (citing Zimmerman v. Isaly Dairy Co., 135 N.E.2d 338 (1956)).

n69. Jane Massey Draper, Annotation, Damages for Wrongful Termination of Franchise Other than Automobile Dealership Contracts, 40 A.L.R. 5th 57, 77-79 (listing examples of cases in sixteen states that have admitted evidence of lost future profits to assess damages for the wrongful termination of a franchise).

n70. "Trover" is defined as follows:

In common-law practice, the action of trover (or trover and conversion) is a species of action on the case, and originally lay for the recovery of damages against a person who had found another's goods and wrongfully converted them to his own use. Subsequently the allegation of the loss of the goods by the plaintiff and the finding of them by the defendant was merely fictitious, and the action became the remedy for any wrongful interference with or detention of the goods of another. In form a fiction; in substance, a remedy to recover the value of chattels wrongfully converted by another to his own use. Common-law form of action to recover value of goods or chattels by reason of an alleged unlawful interference with possessory right of another, by assertion or exercise of possession or dominion over the chattels, which is adverse and hostile to rightful possessor. Such remedy lies only for wrongful appropriation of goods, chattels, or personal property which is specific enough to be identified.

Black's Law Dictionary 1508 (6th ed. 1990) (citation omitted).

n71. Bonsack, supra note 21, at 5-6.

n72. Bonsack, supra note 21, at 9 (quoting McCormick, supra note 22, 48, at 185-86).

n73. Reynolds v. Bank of Am. Nat'l Trust & Sav. Ass'n, 345 P.2d 926, 927 (Cal. 1959).

n74. Note, supra note 22, at 1581 (footnotes omitted).

n75. Note, supra note 22, at 1581.

n76. See e.g., Schonfeld v. Hilliard, 218 F.3d 164, 177 (2d Cir. 2000) ("The market value of an income-producing asset is inherently less speculative than lost profits because it is determined at a single point in time.")

n77. Note, supra note 22, at 1582-83; see also City of Tyler v. Fowler Furniture Co., 831 S.W.2d 399, 407 (Tex. App. - Tyler 1992, writ denied) (approving lost profits and reduction in business value based, in part, on ex post data).

n78. 1 Robert L. Dunn, Recovery of Damages for Lost Profits 6.24, at 500 (5th ed. 1998) ("If a business has not just been injured, but has been destroyed, almost all of the few cases on point hold that lost profits damages are not recoverable at all. The measure of damages is said to be the market value of the business on the date of destruction.").

n79. See, e.g., UST Corp. v. Gen. Rd. Trucking Corp., 783 A.2d 931, 942 (R.I. 2001); 22 Am. Jur. 2d Damages 627 (1988).

n80. See generally Smyth, supra note 17 (stating that new or unestablished businesses can recover damages for lost profits if they can be proven with reasonable certainty).

n81. Tex. Instruments, Inc. v. Teletron Energy Mgmt., 877 S.W.2d 276, 280 (Tex. 1994); see also DSC Communications Corp. v. Next Level Communications, 107 F.3d 322, 329 (5th Cir. 1997) (holding that evidence of intensive market research, human history of the telecommunications industry, and the success of a similar product established that the new technology in question was "likely to generate significant profits").

n82. The matter never reached litigation and is therefore not citable as such.

n83. The two approaches can be reconciled by extending the time horizon for lost profits and incorporating changes in the company's risk profile as a factor in the change in value of those lost profits. See Lam, Inc. v. Johns-Manville Corp., 718 F.2d 1056, 1067-68 (Fed. Cir. 1983) (affirming award of lost profits for plaintiff's lost growth in sales).

n84. See generally Note, supra note 22, at 1581 ("More complete compensation is provided a plaintiff by making the measure of damages the profits he lost due to the violation rather than the market value to someone else of the chance to try to make them.").

n85. See, e.g., Roane-Barker v. Southeastern Hosp. Supply Corp., 392 S.E.2d 663, 669-70 (N.C. Ct. App. 1990) (holding that plaintiff could introduce evidence of his profits before and after the interference with his business in order to place a value on the cost of the interference).

n86. Can. Dry Corp. v. Nehi Beverage Co. of Indianapolis, 723 F.2d 512, 523 (7th Cir. 1983).

n87. Id.; see generally Draper, supra note 69, 2(b), at 73-75, stating that:

It is the franchisor's obligation to object to evidence of lost profits suffered by a terminated franchise. Thus, where a franchisee testifies without objection as to profits..., it has been pointed out that the court is entitled to consider this evidence in relation to the claim of lost profits, and the franchisor, having failed to specifically object to the franchisee's evidence ... concerning profits, is precluded from raising the issue on appeal.

Id. (footnote omitted).

n88. Tex. Instruments, Inc. v. Teletron Energy Mgmt., 877 S.W.2d 276, 280 (Tex. 1994).

n89. 107 F.3d 322 (5th Cir. 1997).

n90. Id. at 329.

n91. Id. at 330.

n92. See, e.g., Tex. Instruments, 877 S.W.2d at 280-81 (explaining that profit recovery is not possible for a proposed product for which no market or sales history has been established).

n93. See id. at 277 (finding that business was not entitled to $ 54 million in damages for lost profits, but awarding $ 600,000 in other damages). Many jurisdictions have either adopted the use of lost profits when the entire business was terminated or revised previous holdings to admit the evidence. The examples used here are for jurisdictions that have neither accepted the practice previously nor in that same opinion.

n94. 877 S.W.2d 276 (Tex. 1994).

n95. Id. at 277.

n96. Id. at 281; see also Hollywood Fantasy Corp. v. Gabor, 151 F.3d 203, 213 (5th Cir. 1998) (reversing the jury award of lost profits for being excessively speculative); Park v. El Paso Bd. of Realtors, 764 F.2d 1053, 1067 (5th Cir. 1985) (rejecting lost profits as "lacking a rational basis").

n97. 917 S.W.2d 29 (Tex. App. - Amarillo 1995), rev'd, 974 S.W.2d 51 (Tex. 1998).

n98. Dal-Worth Tank Co., 917 S.W.2d at 60-61; see also First Title of Waco v. Garret, 802 S.W.2d 254, 261 (Tex. App. - Waco 1990, writ granted) (holding that "sufficient factual data was introduced into evidence to furnish a sound basis for computing lost profits with reasonable certainty"), rev'd on other grounds, 860 S.W.2d 74 (Tex. 1993).

n99. Dal-Worth Tank Co., 917 S.W.2d at 61.

n100. Id. at 63.

n101. Dal-Worth Tank Co., 974 S.W.2d at 53.

n102. But see America's Favorite Chicken v. Samaras, 929 S.W.2d 617, 629 (Tex. App. - San Antonio 1996, writ denied) (finding sufficient evidence to support damages based on plaintiff's presentation of twenty years of lost future profits and lost residual value for defendant's breach of contract to provide two new chicken restaurants); First Title of Waco, 802 S.W.2d at 261 (finding that the plaintiff was entitled to both profits and damages).

n103. 584 F.2d 1164 (2d Cir. 1978).

n104. Id. at 1174.

n105. Id.

n106. See infra note 185 (comparing other jurisdictions' equitable reasoning).

n107. Bolt Associates, 584 F.2d at 1174.

n108. Sharma v. Skaarup Ship Mgmt. Corp., 916 F.2d 820, 826 (2d Cir. 1990).

N109. 194 F.2d 846 (8th Cir. 1952).

n110. Id. at 850.

n111. Id.

n112. Id.

n113. Id. at 854.

n114. Brookside Theatre, 194 F.2d at 854; see also Arnott v. Am. Oil Co., 609 F.2d 873, 887 (8th Cir. 1979) (citing Lehrman v. Gulf Oil Corp., 500 F.2d 659 (5th Cir. 1974), cert. denied, 420 U.S. 929 (1975), for that court's recognition "that going concern value and lost future profits are viable alternative measures of antitrust damages"); Albrecht v. Herald Co., 452 F.2d 124, 128-29 (8th Cir. 1971) (discussing the Brookside Theatre opinion).

n115. Brookside Theatre, 194 F.2d at 854.

n116. 452 F.2d 152 (5th Cir. 1971).

n117. 494 F.2d 16 (5th Cir. 1974).

n118. Terrell I, 452 F.2d at 154-56.

n119. Id. at 159.

n120. Id. at 159-60.

n121. Terrell II, 494 F.2d at 23.

n122. Id. at 24-25.

n123. Id.

n124. Id. at 23-24.

n125. 464 F.2d 26 (5th Cir. 1972).

n126. 500 F.2d 659 (5th Cir. 1974).

n127. 452 F.2d 124 (8th Cir. 1971).

n128. For the purposes of this discussion, assume that there is no significant difference in time between the date of the wrong, the date that the plaintiff recognizes the wrong, and the date that the plaintiff files his complaint. Note, however, that this assumption is inappropriate in antitrust claims, in which the federal statutes provide for the tolling of limitations statutes on civil claims during the government's prosecution of its case against the defendant.

n129. Restatement (Second) of Torts 910 cmt. b (1977).

n130. See, e.g., Ala. Code 7-2A-528 (2002) (explaining lessor's damages for nonacceptance, failure to pay, repudiation, or other default); Colo. Rev. Stat. 13-21-101 (2002) (defining the date from which damages and interest for personal injury cases are determined).

n131. 1 Dobbs, supra note 8, 3.3(3).

n132. Bonsack, supra note 21, at 1; see also E. Farnsworth, Contracts 12.1, at 812-13 (1982) ("The expectation interest is based not on the injured party's hopes at the time he made the contract, but on the actual value that the contract would have had to him had it been performed.").

n133. 943 S.W.2d 185 (Tex. App. - Amarillo 1997, writ denied).

n134. Id. at 188.

n135. Id. at 192-93.

n136. Id. at 192.

n137. Id.

n138. 807 F.2d 520 (7th Cir. 1986).

n139. Id. at 552.

n140. 401 U.S. 321, 339 (1991).

n141. Fishman, 807 F.2d at 552.

n142. Zenith Radio, 401 U.S. at 321.

n143. Id. at 339.

n144. 421 F.2d 61 (1st Cir. 1969).

n145. 175 F.3d 18 (1st Cir. 1999).

n146. Farmington Dowel, 421 F.2d at 84; Coastal Fuels, 175 F.3d at 28.

n147. Farmington Dowel, 421 F.2d at 81; Coastal Fuels, 175 F.2d at 25. Farmington Dowel was wrongfully put out of business in 1958. Farmington Dowel, 421 F.2d at 81. It wanted to show its lost profits from 1956 to the date of trial in 1968, plus its going concern value in 1968. Id. The circuit court affirmed the district court's holding that Farmington Dowel's damage analysis should be confined to lost profits until February 28, 1958, the date that Farmington was put out of business, and its going concern value as of that date. Id. Note that the phrase "Farmington Dowel framework" is used by the First Circuit to denote its opinion in that case and not the method proposed by the plaintiff, Farmington Dowel.

n148. Farmington Dowel, 421 F.2d at 81.

n149. Id. at 84.

n150. The First Circuit is not shy in its own use of ex post data when it justifies its holding: "Further, our sense that Coastal's methodology is very speculative is confirmed by what actually happened. Here, because of the lapse of time, we have some information about later market conditions. That information confirms our earlier judgment that this case requires adherence to the Farmington Dowel format." Coastal Fuels, 175 F.3d. at 29.

n151. See supra text accompanying notes 148-49.

n152. See Lehrman v. Gulf Oil Corp., 500 F.2d 659, 663-64 (5th Cir. 1974) ("Clearly, going concern value and lost future profits are each viable alternative measures of antitrust damages. Future profits cannot be condemned as inordinately more speculative than the going concern value since the former is a crucial component of the latter."); accord, Graphics Prod. Distribution v. Itek Corp., 717 F.2d 1561, 1579 (11th Cir. 1983).

n153. Galigher v. Jones, 129 U.S. 193, 200 (1889).

n154. Baker v. Drake, 53 N.Y. 211, 216 (1873).

n155. 129 U.S. 193 (1889).

n156. Id. at 200.

n157. Bonsack, supra note 21, at 10-11 (quoting Sedgwick, supra note 18, 525); cf. Heilbroner v. Douglas, 45 Tex. 402, 408 (1876) (stating that the measure of damages for breach of contract to deliver property with fluctuating value is whatever will completely indemnify the plaintiff for breach of contract); Miga v. Jensen, 25 S.W.2d 370, 377-78 (Tex. App. - Fort Worth 2000, no pet.) (explaining that where the purchase price was paid in advance, the measure of damages is the highest price available for the purchased item from the date of breach to the date of trial, and where the purchase price was not paid in advance, then the amount of damages is limited to the property's value on the date of breach).

n158. As long as the discount rate exceeds the prejudgment rate, calculating damages as of an earlier date will discount the damage calculation.

n159. 461 U.S. 648 (1983).

n160. Id. at 2061-62.

n161. Id. at 656.

n162. Restatement (Second) of Torts 910 (1977); Restatement (Second) of Contracts 352(b) (1981).

n163. Restatement (Second) of Torts 910(b) (1977).

n164. Id.; see also Union Carbide & Carbon Corp. v. Nisley, 300 F.2d 561 (7th Cir. 1961).

n165. Restatement (Second) of Torts 911(k) (1977).

n166. Id.

n167. Restatement (Second) of Contracts 352(b) (1981).

n168. Id.; see also Kolaski & Kuga, supra note 49, at 7 ("There does not exist a consensus within the forensic economics and accounting literature as to whether or not the benefit of hindsight should be used in calculating damages."); 1 Dunn, supra note 78, 5.8, stating that:

Logically, a comparison of later results with the period of time in dispute has the same weight as a comparison of earlier results. The earlier results are universally held admissible; the later results should also be so held. This is particularly so when the business held only a brief operating history before the claimed wrong occurred.

Id.

n169. 289 U.S. 689 (1933).

n170. Id. at 698. The Supreme Court's endorsement of ex post data can be traced as far back as 1830. See Wilcox v. Ex'rs of Plummer, 29 U.S. 172, 182 (1830).

n171. See infra Part V (discussing jury perceptions, which indicate that ex post evidence tends to be viewed as fact rather than one possible outcome).

n172. See Khalaf v. Williams, 814 S.W.2d 854, 857-58 (Tex. App. - Houston [1st Dist.] 1991, no writ) (holding that jury's finding was not against the great weight of the evidence as the plaintiff's expert gave an opinion on the value of 30% of the company based on the company's tax returns for the four years after the fraud occurred). But see Williams v. Gaines, 943 S.W.2d 185, 194 (Tex. App. - Amarillo 1997, writ denied) (stating that the damage award to the shareholder could not be based on earnings of the corporation after the date of her termination).

n173. See, e.g., Standard Oil Co. of Cal. v. Moore, 251 F.2d 188, 221 (9th Cir. 1957) (discounting ex post data).

n174. See, e.g., City of New York v. Sage, 239 U.S. 57, 61 (1915); see also infra Part III.A.

n175. See, e.g., Kaiser Aluminum & Chem. Corp. v. Bonjorno, 494 U.S. 827, 835-36 (1990) (affirming damages calculation, including postjudgment interest, which is calculated as of the date of judgment).

n176. See, e.g., Fed. R. Civ. P. 71A (governing federal condemnation proceedings).

n177. See, e.g., Gaines Pet Foods Corp. v. Martin Bros. Int'l, 692 F. Supp. 912, 915 (N.D. Ill. 1988) (noting that from an ex ante approach, defendant should have foreseen what district they might have to litigate in).

n178. Ga.-Pac. Corp. v. United States, 640 F.2d 328, 337 n.5 (Ct. Cl. 1980).

n179. Sinclair Ref., 289 U.S. at 698.

n180. Id.

n181. Id. at 699.

n182. Lam, Inc. v. Johns-Manville Corp., 718 F.2d 1056, 1068 (Fed. Cir. 1983); Fromson v. W. Litho Plate & Supply Co., 853 F.2d 1568, 1576 (Fed. Cir. 1988).

n183. 339 U.S. 261 (1950).

n184. Id. at 267.

n185. Many federal courts' opinions on antitrust claims write of the need for a lenient standard for the quality and quantity of evidence required, especially when liability has already been established. This standard is best typified in Zenith Radio Corp. v. Hazeltine Res., Inc., 395 U.S. 100, 123 (1969):

Trial and appellate courts alike must also observe the practical limits of the burden of proof which may be demanded of a treble-damage plaintiff who seeks recovery for injuries from a partial or a total exclusion from a market; damage issues in these cases are rarely susceptible of the kind of concrete, detailed proof of injury which is available in other contexts.

Id. This standard, however, is not materially different from that quoted by the Second Circuit for breach of contract damages under seasoned New York law in Indu Craft, Inc. v. Bank of Baroda, 47 F.3d 490, 496 (2d Cir. 1995) (quoting Wakeman v. Wheeler & Wilson Mfg. Co., 101 N.Y. 205, 209 (1886)):

When it is certain that damages have been caused by a breach of contract, and the only uncertainty is as to their amount, there can rarely be good reason for refusing, on account of such uncertainty, any damages whatever for the breach. A person violating his contract should not be permitted entirely to escape liability because the amount of the damages which he has caused is uncertain.

Id.; see also Southwest Battery Corp. v. Owen, 115 S.W.2d 1097, 1099 (Tex. 1938) (holding that "[a] party who breaks his contract cannot escape liability because it is impossible to state or prove a perfect measure of damages").

n186. See infra Part III.B.

n187. Southwest Battery Corp., 115 S.W.2d at 1098 (Tex. 1938).

n188. See, e.g., Poirer v. Grand Blanc Township, 481 N.W.2d 762, 766 (Mich. App. 1992) (discussing the Arizona Supreme Court's case-by-case approach to the issue) (citing Corrigan v. Scottsdale, 720 P.2d 513, 518-519 (Ariz. 1986)).

n189. See, e.g., Telemark Dev. Group, Inc. v. Mengelt, 181 F. Supp. 2d 897, 900 (N.D. Ill. 2002) (requiring that plaintiffs provide Illinois courts with a "reasonable" basis for computing breach of contract damages).

n190. See, e.g., Courtney v. Glann, 782 So. 2d 162, 166 (Miss. App. 2000) (establishing that plaintiffs must prove their damages by a "preponderance of the evidence").

n191. See 1 Dobbs, supra note 8, 3.4 ("Traditional notions of proof hold that the plaintiff must prove not only damages but any element of his case by a preponderance of the evidence meaning a greater weight of the evidence. This would mean that the plaintiff would have to prove elements of his case to be true, more likely than not; and more likely than not, reduced to numbers, means anything more than a 50% chance."); Cerillo, supra note 52, 115. But see 1 Dunn, supra note 78, 1.1, at 2 ("Recovery of damages for loss of profits is subject to the general principle that damages must be proximately caused by the wrongful conduct of the defendant.").

n192. David W. Robertson, The Common Sense of Cause in Fact, 75 Tex. L. Rev. 1765, 1794 (1997) ("In traditional judicial thinking, we must guard against holding a defendant responsible when he has caused no harm, but once we know that he has caused some harm, we need not worry overmuch about making him pay too much.").

n193. Kramer v. Lewisville Mem'l Hosp., 858 S.W.2d 397, 405 (Tex. 1993).

n194. Id. at 400.

n195. Id. at 405 (citation omitted).

n196. 282 U.S. 555 (1931).

n197. See, e.g., Shaw Warehouse Co. v. S. Ry. Co., 288 F.2d 759, 777 (5th Cir. 1961) (stating that "it was open to the jury to find that the price cutting and the resulting lower prices were directly attributable to the lawful combination").

n198. See, e.g., Tenngasco Gas Gathering Co. v. Fischer, 624 S.W.2d 301, 304 (Tex. App. - Corpus Christi 1981, writ ref'd n.r.e.) (ruling expert testimony based on questionable data admissible for jury evaluation); Breidor v. Sears, Roebuck & Co., 722 F.2d 1134, 1138-39 (3d Cir. 1983) (allowing jury to determine expert's credibility as long as there is some logical basis for his testimony).

n199. See, e.g., Standard Oil Co. of Cal. v. Moore, 251 F.2d 188, 220 (9th Cir. 1958). But see Welch v. U.S. Bancorp Realty & Mortgage Trust, 596 P.2d 947, 963 (Or. 1979) ("The court should intervene only when it can say that the evidence is clearly insufficient to establish the claim of lost profits."); State Nat'l Bank v. Farah Mfg. Co., 678 S.W.2d 661, 695 (Tex. App. - El Paso 1984, writ dism'd by agr.) ("The factual basis upon which he arrived at his expert opinion and the inadequacy or vulnerability of his opinion goes to the weight and credibility of his testimony rather than its admissibility.").

n200. Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579, 587 (1993).

n201. Id. at 590-91.

n202. Id. at 596.

n203. Lithuanian Commerce Corp. v. Sara Lee Hosiery, 179 F.R.D. 450, 463 (D.N.J. 1998) ("The Federal Rules of Evidence require that expert testimony pass the threshold of admissibility independent of mechanisms which may aid the jury in weighing such testimony at trial [rebuttal and cross examination]. Again, the availability of such devices cannot support the admissibility of expert testimony.") (citation omitted).

n204. Gen. Elec. Co. v. Joiner, 522 U.S. 136, 149-50 (1997) (citing amici suggestion that an independent expert be retained by the court to monitor expert testimony for its truth).

n205. See, e.g., Scott Brewer, Scientific Expert Testimony and Intellectual Due Process, 107 Yale L.J. 1535, 1627 (1998) (discussing issues involved with what author refers to as "meta-experts").

n206. See Weisgram v. Marley Co., 528 U.S. 440 (2001). In affirming the Eighth Circuit's reversal of the trial court's ruling to admit expert testimony and directing judgment for defendant the Supreme Court stated: "It is implausible to suggest, post-Daubert, that parties will initially present less than their best expert evidence in the expectation of a second chance should their first try fail." Id. at 455. Unfortunately, the prospect of a Weisgram type of ruling can be so enticing that it presently appears that few issues are safe from such a challenge.

n207. 251 F.2d 188 (9th Cir. 1958).

n208. Id. at 222. The data included general business conditions, gasoline prices, and traffic flow around the business site for three years after the valuation date.

n209. 279 U.S. 151 (1929).

n210. 239 U.S. 57 (1915).

n211. Id. at 61.

n212. Ithaca Trust Co., 279 U.S. at 154-55.

n213. Id. at 155.

n214. Sinclair Ref. Co. v. Jenkins Petroleum Process Co., 289 U.S. 689, 698-99 (1933).

n215. Standard Oil Co. of Cal. v. Moore, 251 F.2d 189 (9th Cir. 1959).

n216. Farmington Dowel Prods. Co. v. Forster Mfg. Co., 421 F.2d 61 (1st Cir. 1969).

n217. Lehrman v. Gulf Oil Co., 464 F.2d 26 (5th Cir. 1972).

n218. Lehrman v. Gulf Oil Co., 500 F.2d 659 (5th Cir. 1974).

n219. Fishman v. Estate of Wirtz, 807 F.2d 520, 552 (7th Cir. 1986).

n220. 411 F.2d 897 (9th Cir. 1969).

n221. Id. at 908-09.

n222. Simpson v. Union Oil Co. of Cal., 396 U.S. 13, 16 (1969).

n223. Id. at 16; see also Lessig v. Tidewater Oil Co., 327 F.2d 459, 473 (9th Cir. 1964) (holding that plaintiff, as a service station lessee whose lease was wrongfully terminated, was entitled to a jury instruction as to lessee's right to recover lost profits).

n224. 218 F.3d 164 (2d Cir. 2000).

n225. Id. at 170.

n226. Id. at 172-74.

n227. Id. at 175-77.

n228. Id. at 176.

n229. Schonfeld, 218 F.3d at 175-76.

n230. 916 F.2d 820 (2d Cir. 1990).

n231. Id. at 825.

n232. Id.; cf. Indu Craft, Inc. v. Bank of Baroda, 47 F.3d 490, 495-96 (2d Cir. 1995) (holding that lost profits is one method of proving damages; however, the market approach to the going concern method is the best measure of damages for the complete destruction of a business).

n233. Sharma, 916 F.2d at 826 (citing Aroneck v. Atkin, 456 N.Y.S.2d 558, 559 (App. Div. 1982), for the argument that appropriate damages are based on the conditions that investors anticipated at the time of breach).

n234. 456 N.Y.S.2d 558 (App. Div. 1982).

n235. Sharma, 916 F.2d at 826. But see Wakeman v. Wheeler & Wilson Mfg. Co., 4 N.E. 264 (N.Y. 1886) (holding in part that the trial court erred in excluding ex post data on defendant's subsequent sales that could have assisted the jury in their damage deliberations).

n236. 873 F.2d 522 (2d Cir. 1989).

n237. Id. at 533-34. This methodology was also approvingly cited in Indu Craft, 47 F.3d at 496 (2d Cir. 1995).

n238. 584 F.2d 1164 (2d Cir. 1978).

n239. Id. at 1174.

n240. 41 F.3d 1570 (2d Cir. 1994).

n241. Id. at 1577-78.

n242. Id. at 1577; see also Autowest v. Peugot, Inc., 434 F.2d 556, 565 (2d Cir. 1970) (affirming admissibility of ten-year projections for lost profits to assist jury in determining damages for the wrongful termination of an auto dealership franchise).

n243. Tex. Instruments, Inc. v. Teletron Energy Mgmt., 877 S.W.2d 276, 280 (Tex. 1994) (citing Pace Corp. v. Jackson, 284 S.W.2d 340, 348-49 (Tex. 1955), for comparison of business's successful operations both before and after the claim arose).

n244. E.g., Pitchford v. Pepi, Inc., 531 F.2d 92, 99 (3d Cir. 1976) (finding it would have been sufficient if the wrongful acts had a tendency to injure Pitchford's business and if evidence of a decline in the value of Pitchford's profits that was not shown to be attributable to causes other than the antitrust violation had been introduced); Holt Atherton Indus., Inc. v. Heine, 835 S.W.2d 80, 85 (Tex. 1992).

n245. In re Aluminum Phosphide Antitrust Litig., 893 F. Supp. 1497, 1507 (D. Kan. 1995) (affirming finding that plaintiffs failed to demonstrate that their damages were caused by defendant's failure to repair).

n246. See supra text accompanying notes 109-15.

n247. Twentieth Century-Fox Film Corp. v. Brookside Theatre, 194 F.2d 846, 856 (8th Cir. 1952) (explaining that the passage of time permits better proof of extent of harm).

n248. 452 F.2d 124, 128 (8th Cir. 1971); see also Michael Todd & Co. v. Lacal Co., 583 F.2d 1056, 1058-60 (affirming the use of defendant's ex post profits to calculate damages under Nebraska law); Shearson v. Boise Cascade Corp., 478 F.2d 1111, 1117 (8th Cir. 1973) (affirming the use of defendant's ex post profits to calculate damages under Iowa law).

n249. Brookside Theatre, 194 F.2d at 856.

n250. Id. at 856 (quoting Restatement of Torts 910 (1934)) (omission in original).

n251. Lehrman v. Gulf Oil Corp., 500 F.2d 659, 670 (5th Cir. 1974) (footnote omitted).

n252. Fishman v. Estate of Wirtz, 807 F.2d 520, 529 (7th Cir. 1986).

n253. Id. at 552; see also supra text accompanying note 139.

n254. Fishman, 807 F.2d at 552.

n255. Id. (citation omitted); see also Union Carbide & Carbon Corp. v. Nisely, 300 F.2d 561 (10th Cir. 1961) (holding that data from actual sales is more reliable than expectation prices).

n256. Fishman, 807 F.2d at 552.

n257. Coastal Fuels of Puerto Rico, Inc. v. Caribbean Petroleum Corp., 175 F.3d 26 (1st Cir. 1999).

n258. Id. at 33.

n259. 156 F.3d 452 (3rd Cir. 1998).

n260. Id. at 485-86.

n261. 429 U.S. 477 (1977).

n262. William H. Page, Antitrust Damages and Economic Efficiency: An Approach to Antitrust Injury, 47 U. Chi. L. Rev. 467, 470-71 (1980).

n263. Rossi, 156 F.3d at 485-86 (emphasis in original) (citations omitted); see also John D. Taurman & Jeffrey C. Bodington, Measuring Damage to a Firm's Profitability: Ex Ante or Ex Post?, 37 Antitrust Bull. 57, 58 (1992) (stating preference for actual data over "but for" calculation).

n264. 853 F.2d 1568 (Fed. Cir. 1988).

n265. Id. at 1574.

n266. Id. at 1575; see also Lam, Inc. v. Johns-Manville Corp., 718 F.2d 1056, 1068 (Fed. Cir. 1983) (affirming admission of post-infringement growth rates to form a basis for lost profits for lower sales growth) (citing Sinclair Ref. Co. v. Jenkins Petroleum Process Co., 289 U.S. 689, 697-99 (1933); Trans World Mfg. Corp. v. Al Nyman & Sons, Inc., 750 F.2d 1552, 1556-58 (Fed. Cir. 1984) (holding that it is error to exclude evidence of infringer's actual ex post profits)).

n267. Fromson, 853 F.2d at 1575-76.

n268. 717 A.2d 724 (Conn. 1998).

n269. Id. at 735; see also W. Haven Sound Dev. Corp. v. W. Haven, 514 A.2d 734, 742 (Conn. 1986) (showing a "going concern" value to be calculated in much the same way as a lost profits value).

n270. Beverly Hills Concepts, 717 A.2d at 736.

n271. Id. at 739; see also Super Valu Stores, Inc. v. Peterson, 506 So. 2d 317, 330 (Ala. 1987) (upholding a five million dollar verdict for breach of contract to open grocery store, where plaintiff projected profits of $ 20 million over fifteen years, and defendant conceded that statistical evaluation of future profits, which it had itself generated, was reliable); El Fredo Pizza, Inc. v. Roto-Flex Oven Co., 261 N.W.2d 358, 360 (Neb. 1978) (stating that increased profits earned after faulty pizza oven was replaced were indicative of profits lost as result of defendant's breach of warranty of merchantability); Chung v. Kaonohi Ctr. Co., 618 P.2d 283, 292 (Haw. 1980) (holding that it was proper to base future profit calculation on experience of third party conducting virtually identical business at same location); Fera v. Village Plaza, Inc., 242 N.W.2d 372, 375 (Mich. 1976) (upholding a $ 200,000 award for lost profits where the plaintiff had claimed that breach of a ten-year lease to operate a liquor store would result in $ 270,000 in lost profits).

n272. Jeffrey G. MacIntosh & David C. Frydenlund, An Investment Approach to a Theory of Contract Mitigation, 37 U. Toronto L.J. 113, 120 n.28 (1987).

n273. See, e.g., Am. Gas Ass'n v. FERC, 912 F.2d 1496, 1508 (D.C. Cir. 1990) (using ex post data to confirm ex ante projections).

n274. Note, supra note 22, at 1573 (citing Bigelow v. RKO Radio Pictures, Inc., 327 U.S. 251 (1946)); see also J. Truett Payne Co. v. Chrysler Motors Corp., 451 U.S. 557 (1981) (reiterating the holding in Bigelow, but remanding for determination of liability).

n275. United States Football League v. Nat'l Football League, 842 F.2d 1335, 1377-79 (2d Cir. 1988); In re IBM Peripheral EDP Devices Antitrust Litig., 481 F. Supp. 965, 1013 (N.D. Cal. 1979), aff'd, 698 F.2d 1377 (9th Cir. 1983).

n276. In re IBM, 481 F. Supp. at 1013 ("If injury is shown to be attributable to factors for which the defendant cannot be held liable, then a damage case that ignores those factors must fail."); Fibreboard Paper Prods. Corp. v. E. Bay Union of Machinists, 227 Cal. App. 2d 675, 704-05 (1964) (stating that the burden of proving appropriate reductions or exclusions rests on the defendant); Borne Chem. Co. v. Dictrow, 445 N.Y.S.2d 406, 413-14 (App. Div. 1981). The Borne court held that after the plaintiff adequately proves his loss, the defendant may introduce evidence "to show that by reason of economic depression or some other cause than the competing business, the plaintiff's net profits would have been less." Id. The burden then shifts back to the plaintiff, who must either successfully rebut it or show with reasonable certainty the proportion of the loss attributable to the wrongful act of the defendant. Id. See generally St. Julien, supra note 15, at 119 (analyzing Texas's approach of using many separate classes of damages).

n277. Arthur Andersen & Co. v. Perry Equip. Corp., 945 S.W.2d 812, 817 (Tex. 1997).

n278. Id.

n279. Id.

n280. Id.

n281. Pierce v. Ramsey Winch Co., 753 F.2d 416, 421 (5th Cir. 1985).

n282. C. A. May Marine Supply Co. v. Brunswick Corp., 649 F.2d 1049, 1053 (5th Cir. 1981).

n283. See Fredette v. Allied Van Lines, Inc., 66 F.3d 369, 373 (1st Cir. 1995) (citing Weber v. Chicago & Northwestern Transp. Co., 530 N.W.2d 25, 29 (Wis. App. 1995)) (holding that a jury is not bound by an expert's opinion regarding an estimation of damages); accord Birmingham Slag Div. of Vulcan Materials Co. v. Chandler, 231 So. 2d 329, 331 (Ala. Civ. App. 1970). But see In re Wolverton Assoc., 909 F.2d 1286, 1296 (9th Cir. 1990) (reiterating the principle that the factfinder cannot arbitrarily disregard an expert's opinion when it has not been discredited); Knox v. Taylor, 992 S.W.2d 40, 62 (Tex. App. - Houston [14th Dist.] 1999, no pet.) (noting that the factfinder cannot capriciously calculate a damage amount that is unsupported by the trial evidence).

n284. Kumho Tire Co. v. Carmichael, 526 U.S. 137, 147-48 (1999).

n285. Fed. R. Evid. 703.

n286. The general practice for an investment banker who manages an initial public offering or the sale of a

company is to provide company projections to establish an estimated range for the offering price for stock or the asking price for an entire company. While this appears to be an ex ante process, the actual offering price or sale price is determined by the market's response to the preliminary offering. For example, in an initial public offering, the final offering price is determined after careful consultation with the syndicate manager who collects a "book" of all indications of interest at various prices.

n287. James M. Patell et al., Accumulating Damages in Litigation: The Roles of Uncertainty and Interest Rates, 11 J. Legal Stud. 341, 346-47 (1982).

n288. Id. at 348.

n289. Id. at 349-51.

n290. Id.

n291. Franklin M. Fisher & R. Craig Romaine, Janis Joplin's Yearbook and the Theory of Damages, 5 J. Acct. Aud. & Fin. 145, 156 (1990). Fisher and Romaine also criticize the ex post approach as producing damage awards that are unfairly disproportionate. Id. Given that their example of Janis Joplin's yearbook relates to a tort, it is unclear whether disproportionality analysis would apply. For discussion of the application of disproportionality analysis to damages for breach of contract, see Larry T. Garvin, Disproportionality and the Law of Consequential Damages: Default Theory and Cognitive Reality, 59 Ohio St. L.J. 339 (1998).

n292. Restatement (Second) of Torts 910 cmt. c, illus. 5 (1977).

n293. See supra Part II.D.

n294. Patell et al., supra note 287, at 351.

n295. See Banco de Portugal v. Waterlow & Sons Ltd. [1932] A.C. 452, 506 (H.L. 1932) ("It is often easy after an emergency has passed to criticize the steps which have been take to meet it, but such criticism does not come well from those who have themselves created the emergency.") (appeal taken from C.A.).

n296. 1 Dobbs, supra note 8, 3.4.

n297. Fisher and Romaine, supra note 291, at 156.

n298. Lehrman v. Gulf Oil Corp., 464 F.2d 26, 45 (5th Cir. 1972).

n299. Taurman & Bodington, supra note 263, at 92.

n300. State Nat'l Bank of El Paso v. Farah Mfg. Co., 678 S.W.2d 661, 691 (Tex. App. - El Paso 1984, writ dism'd by agr.) (alternation in original) (citation omitted).

n301. MacIntosh & Frydenlund, supra note 272, at 113-14.

n302. MacIntosh & Frydenlund, supra note 272, at 120.

n303. MacIntosh & Frydenlund, supra note 272, at 120-21.

n304. MacIntosh & Frydenlund, supra note 272, at 115.

n305. MacIntosh & Frydenlund, supra note 272, at 115.

n306. MacIntosh & Frydenlund, supra note 272, at 154.

n307. William B. Tye et al., How to Value a Lost Opportunity: Defining and Measuring Damages from Market Foreclosure, 17 Res. in Law & Econ. 83 (1995).

n308. Id. at 85.

n309. Id. at 94-96.

n310. Id. at 114. It is interesting to note in passing that the authors distinguish the lost profits method as associated with the ex post approach and going concern with the ex ante approach.

n311. Id. at 113.

n312. Tye et al., supra note 307, at 84.

n313. See, e.g., Edith Greene, On Juries and Damage Awards: The Process of Decisionmaking, 52 Law & Contemp. Probs. 225, 226 (1982); Note, supra note 22, at 1586.

n314. See supra text accompanying note 283.

n315. Daniel W. Shuman et al., Juror Assessments of the Believability of Expert Witnesses, A Literature Review, 36 Jurimetrics J. 371, 381 (1996).

n316. Reid Hastie & W. Kip Viscusi, What Juries Can't Do Well: The Jury's Performance as Risk Manager, 40 Ariz. L. Rev. 901, 911-12 (1998).

n317. Kim A. Kamin & Jeffrey J. Rachlinski, Ex Post <noteq> Ex Ante, 19 Law & Hum. Behav. 89, 99 (1995).

n318. Id. at 98.

n319. Richard B. Miller, The Damages Dilemma in the Bet-the-Company Case, 17 Litig. 12, 12 (1991).