Ex-Ante and Ex-Post Considerations in Economic Damages Calculations - Quick Read Buzz

National Association of Certified Valuators and Analysts

The choice and use of an ex-ante or ex-post analysis can lead to divergent results in protracted litigation. The article provides an illustration of how and why the results may differ. Litigation consultants are advised to consider the above and await instruction from legal counsel regarding the approach that needs to be taken.

On New Year’s Day 2010, Defendant Deliveries was hired by Defendant Distributors to make an unscheduled delivery of farm supply materials to the Unrelated Third Party Farm located on Route 18 in Dexter County. Defendant Deliveries hired Defendant Driver, a driver unfamiliar with Route 18, to make the delivery. Defendant Driver had spent all of December 31, 2009, and much of New Year’s Day 2010 drinking liquor and was intoxicated. He drove past the Unrelated Third Party Farm’s main gate and then, unable to turn his 18 wheel rig around on the narrow Route 18, turned into the main gate of the Plaintiff Farm, the next farm on Route 18.

Defendant Driver did a u-turn in the Plaintiff Farm delivery area to head back to the Unrelated Third Party Farm without noticing that the rear of his semi-trailer struck and broke the application hose of the Plaintiff Farm’s anhydrous ammonia tank application nozzle. While Defendant Driver continued on his merry way, the entire tank of anhydrous ammonia leaked throughout the Plaintiff Farm property causing millions of dollars of environmental cleanup costs and triggering an EPA inquiry.

Plaintiff Farm sued Defendant Driver, Defendant Deliveries, and Defendant Distributors for its lost profits, out-of-pocket cleanup costs, and other economic damages. The litigation was complicated by multiple factors, including Plaintiff Farm’s poorly worded business interruption insurance policy; by the fact that Defendant Distributors had previously noted Defendant Driver’s drunkenness and agreed that he could drive on New Year’s Day, as no other driver was available; and by Defendant Driver’s inebriation and trespass on Plaintiff Farm’s property.
To further complicate the legal issues of liability and contributory negligence, Plaintiff Farm had installed and set a safety valve at the end of the business day on New Year’s Eve to prevent accidental spillage, but Bad Employee, one of its employees, had come on site at 3:00 a.m. January 1 (also intoxicated) to draw some anhydrous ammonia to manufacture methamphetamines at his house and had not reset the safety valve. After four years of cleanup, investigations, litigation, depositions, finger-pointing and a failed mediation, the case was finally set for trial January 2, 2014 (but has been continued for various reasons).

Plaintiff Farm’s financial position is precarious, and it may not survive as a going concern for a combination of reasons including: not all of its potential losses were covered by its insurance policies; several of its pre-incident accounts receivable remained outstanding—that is uncollectable—and management misjudged market prices when it decided to enter into future grain contracts for its products.

Economic damages awards in litigation serve a double purpose. They compensate entities that suffered harm from unlawful acts, and they deter future unlawful acts. The optimal compensation award should put an injured party in the same economic position it would have been but for the act. ²

Had the trial taken place on January 1, 2010 and had plaintiff been paid its damages that same day, determining a reasonable damages amount may have been less complicated. During the four year time delay, information about the litigating parties’ position and the time value of money has also changed the parties’ perception of the damages.

A pure ex ante (from before) analysis would use information only if it were available at the time of the unlawful act to calculate the damages incurred at the time of the act. ³ A pure ex post (from after) analysis uses all the information available up to the date of the analysis ⁴—in this case, the originally expected date of trial—an outcome-based analysis.

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The difference between ex ante and ex post analyses lie in which information subsequent to the unlawful act the analyst uses, the determination of the measurement date, and how the analyst discounts future damages. ⁵ In this case, the ex post analysis would be performed at January 1, 2014, while the ex ante analysis would be performed at January 1, 2010. ⁶

Under a pure ex ante analysis, the analyst uses only information known or knowable at the date of the injury and measures damage at January 1, 2010. The analyst could calculate (and a court could award) prejudgment interest from January 1, 2010, to January 1, 2014.

Under a pure ex ante analysis, the analyst estimates the future lost profits of Plaintiff Farm or, possibly, its entire lost business value ⁷—all cleanup costs and a host of other financial elements using only information known and knowable at January 1, 2010—including perhaps having to estimate the future cost of grain. Those future lost cash flows would have to be discounted back to January 1, 2010 using an appropriate discount rate—an additional element of lost profits calculations that require methodology determination and professional judgment.
Under an ex post analysis, the analyst would, in this matter, have more and/or better data available from the four year passage of time regarding a host of financial elements, including the cost of cleanup and the price of grain—and would measure damages at January 1, 2014. Future cash flows would be discounted to the day of judgment (assumedly January 1, 2014) at the time of preparing expert reports. Past lost cash flows (from January 1, 2010, to January 1, 2014) would be brought forward to the date of trial at an appropriate interest rate.

In a landmark 1933 “book of wisdom” case, the U.S. Supreme Court noted what might happen if a trial does not follow quickly: “[a] different situation is presented if years have gone by before the evidence is offered. Experience is then available to correct uncertain prophesy. 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.”

This has led to a somewhat “hybrid” approach—using all available information known from date of injury to date of trial (in this case, what was learned from 2010 to 2014), but measuring damages at the date of injury (in this case January 1, 2010) not the date of trial (in this case assumed to be January 1, 2014) and, potentially, calculating prejudgment interest from date of injury to date of trial to assist the trier of fact in the event prejudgment interest is awarded.

There is a significant amount of case law showing that financial experts can and should consider information that becomes known after the date of injury in an economic damages analysis. As the law has not specified a single way to discount lost profits, financial experts should obtain the appropriate legal guidance regarding the applicable methodology accepted by the courts in precedent cases.

Because precedent has accepted both ex ante and ex post analyses, besides the “book of wisdom,” there is another consideration to be taken into account—“the wrongdoers’ rule.” Assume that, at trial, the court took into account that Defendant Driver was drunk when he trespassed on Plaintiff Farm’s property; that Defendant Deliveries and Defendant Distributors knew he had a history of being intoxicated on the job; and that Plaintiff Farm had no contributory negligence regarding Bad Employee’s failure to reset the safety valve on the anhydrous ammonia tank—and found all defendants liable for all Plaintiff Farm’s economic damages.

Then, “[w]hen the Court has found liability; the wrongdoers’ rule gives the benefit of the doubt to Plaintiffs, leaving Defendants with the burden of dispelling any uncertainty.” Defendant Driver, Defendant Deliveries, and Defendant Distributors should not benefit if because their wrongdoing made it difficult for plaintiff to establish the exact amount of its economic damages.

It appears that the risk of uncertainty in calculating economic damages should be thrown on the wrongdoer (when found liable) instead of upon the injured party. Some authors have concluded that because both the ex ante and the ex post approaches yield arguable reasonable results, defendants carry the burden of showing why the Plaintiff’s analysis is not appropriate for a specific case.

Analysts should be careful to ensure that they use the appropriate ex ante or ex post benchmarks in their definition of economic damages. Benchmarks for damages can be established by management’s own forecast of future performance; by using the forecast of independent experts; or by creating a benchmark based on the performance of comparable companies. Calculating “but for” profits—the hypothetical amount of profits that would have been earned has the injury not taken place—involves making assumptions, which may differ using an ex ante or ex post analysis.

Ex ante benchmarks use only information that was available before the event while ex post benchmark use data available through the date of analysis. In the four-year period between
Defendant Driver striking the anhydrous ammonia tank valve and the date of trial, the farming economy along Route 18 could have altered significantly.

Ex ante and ex post benchmarks (no matter how determined) could have changed significantly due to the economy, due to the impact of the environmental cleanup on the area as a whole, and/or due to significant changes in grain prices. Some or all of these factors may have had an impact on Plaintiff Farm's profitability and/or financial condition. Some factors may be attributable to Defendant Driver's actions and some may have occurred and impacted Plaintiff's profitability and/or financial condition even if the anhydrous ammonia tank had not leaked.

When completing economic damages engagements, litigation support professionals should keep in mind ex ante and ex post concepts as well as the “book of wisdom” and “the wrongdoers’ rule” established by the courts. In addition, the litigation support professional should consider discussing these concepts with retaining counsel before incorporating any of them into their assumptions, methodology and economic damages modeling.

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3Extracted from the Litigation Services Handbook, Section §5.2.
4Extracted from the Litigation Services Handbook, Section §5.2.
5Extracted from the Litigation Services Handbook – Section §5.2.
6Assuming that there are no differences between measuring damages on January 1 or January 2.
7An analyst deciding to use a lost profits economic damages approach on an ex post, “book of wisdom” basis may derive a different loss amount from an analyst deciding to use a lost enterprise value business valuation approach on a “known and knowable” basis. It is possible, therefore, that even if the entire value of Plaintiff Farm was lost due to the defendants’ actions, that lost profits and business valuation methodologies may compute different results.
10This is Michael A. Crain’s conclusion included in the Fannon textbook at page 10-10.
11Extracted from the Litigation Services Handbook, Section §5.7.
12Extracted from the Litigation Services Handbook, Section §5.7.
13Extracted from the Litigation Services Handbook, Section §5.7.
15The Value Examiner: Using Ex-Ante and Ex-Post Benchmarks in Estimating Damages, May/June 2010 Ed. By Donald M. May, Ph.D.