

FORENSIC & VALUATION

LOST PROFITS

The Basics of Lost Profits Calculations

Consider these Scenarios

Your company is the exclusive distributor of a line of auto parts in the United States. You discover the auto parts manufacturer is selling directly to your customers, behind your back, in violation of the distributorship agreement.

You own a fast food franchise located on property with a restrictive covenant stating no other fast food restaurants can locate in your complex. Nevertheless, a new fast food restaurant is constructed and allowed to open next door.

The supplier of components used in the manufacture of a medical device has ceased shipments to your company, violating the supplier agreement and halting production of your products. You later find the supplier is shipping components to competitors at higher prices.

These scenarios are all examples of potential claims for lost profits damages. Lost profits damages arise when financial harm is allegedly suffered by one party due to the wrongful actions of another. In a litigation setting, CPA experts are often called upon to quantify the profits the injured party or plaintiff has lost. A lost profits calculation typically consists of determining what profits the plaintiff would have been able to achieve "but for" the alleged damaging acts. The amount of lost profits is calculated as the difference between the "but-for" profits and the actual profits that did exist during the damage period. The purpose of a damage award is to restore the injured party to the position they were in prior to the damaging act.

The calculation of lost profits is complex and dependent on unique facts in each particular case. The challenge to the CPA is to present to the trier of fact, be it a judge, jury or arbitrator, a lost profits analysis that is reasonable, credible, relevant and well-supported.

So, what are the elements of lost profits calculations? What are the accepted methods and procedures used by CPAs in calculating lost profits? The following is the basic formula for lost profits calculations:

Lost Revenues - Avoided Costs = Net Lost Profits

Estimating Lost Revenues

The first step in preparing a lost profits model is to estimate lost revenues. The methods discussed in accounting literature typically used to estimate lost revenues include the before and after method, the yardstick method, the sales projection method and the market model method. A combination of these methods is often used by CPAs, depending on the facts of the claim.

The before and after method is based on historical information and compares what plaintiff's profits were before the damaging event, to profits after the damaging event. The yardstick or benchmark method is used to estimate lost revenue by comparing the business to similar businesses, industry averages or some other relevant guideline. The sales projection method uses forecasts or budgets prepared by the business to determine lost revenues. The market model estimates lost revenues based on what the business's market share would have been without the wrongful act. Other methods may also apply, including calculating lost profits based on terms related to a contract or by analyzing the defendant's profits as a measure of loss. Whatever method chosen should be logical and reasonable based on the facts and circumstances of the particular case.

The underlying assumption of the various lost profits methods described is "but for" the defendant's actions, the plaintiff would have continued to achieve profits at the levels achieved before the event. The lost revenues estimated by these methods are equal to the projected "but for" revenues, less the actual revenues during the damage period.

The CPA should also be aware of the impact other factors may have when estimating lost revenues, including growth rates, industry trends, economic trends, seasonality, competition, specific characteristics of the business's product or service, including technology and obsolescence. The existence of these factors may contribute or be responsible for the decline in plaintiff's revenues and are not a result of defendant's harmful conduct. It is important

for the CPA to support and justify estimates and calculations with sufficient data, research and evidence. Without proper verifiable evidence, the lost profits analysis may be viewed by the court as speculative and lacking credibility.

Avoided Costs

The next step in the lost profits model is to calculate the avoided costs, or costs that would have been incurred to produce the lost revenue. These costs are also known as saved costs or variable costs that vary directly with sales volume, as opposed to fixed costs that are incurred regardless of the level of sales. Examples of variable costs may be materials and labor in a manufacturing plant. Examples of fixed costs may be rent and insurance expenses. Some costs may also be semi-variable, with a fixed component until a certain level of sales are reached and then become variable.

Plaintiff's historical financial data and cost environment for the business should be analyzed to understand the relationship of certain costs to revenues and to determine fixed versus variable costs. The CPA may rely on ratio analysis, detailed account analysis, estimates and allocations to calculate variable costs. Statistical methods, such as regression analysis that focuses on the relationship between costs and sales volume, or attribute sampling may also be used for more complex cost structures. Again, the CPA should support the calculations and evaluate the determination of avoided costs for reasonableness.

Damage Period

Lost profits can only be claimed during the damage period. The beginning of the period begins when the damaging event occurs and the damage period ends when the business returns to a normal level of operations. The damage period could be just a few days or could continue for years. When the period of loss is ongoing, lost profits are projected into the future based on the estimate of time for the plaintiff to fully recover from the harmful act.

A situation may exist where the damaging act has caused the complete demise of the business with no possible recovery. If the damage is permanent, the CPA should consider employing business valuation methods to measure the loss. In this situation, the plaintiff may claim the value of the business as a loss as of the date of damage, but may not claim lost profits as well.

Calculation of Net Lost Profits

Net lost profits can now be calculated by subtracting the estimate of avoided costs from the estimate of lost revenues during the damage period. Damages are usually calculated as of the date of trial, and may have both a past and future component. Past damages are those that have occurred from the date of the damaging event to the trial date. Prejudgment interest may be applied to fully compensate

the plaintiff for the past loss as of this date.

However, in most cases, the trial date is not the end of the damage period. When damages are ongoing, future projected lost profits are discounted to present value as of the date of trial using an appropriate discount rate which reflects the time value of money and risk of achieving the future profits. The objective of the discount rate is to award the plaintiff a sum that can be invested today in a similar project with similar risks that will yield an amount equivalent to the expected lost profits.

Lost profits calculations commonly use plaintiff's cost of equity, cost of debt or a weighted average cost of capital approach to derive a discount rate. However, the selection of the appropriate discount rate varies with jurisdictions and specific cases, and at times, courts have accepted the use of a risk free rate. The discount rate greatly impacts the damage analysis and should be carefully developed and supported.

Other Factors to Consider

The CPA should also consider the issue of causation or how damages are linked directly to defendant's wrongful conduct. There may be other reasons for plaintiff's loss, such as a recession, natural disaster or lack of available financing which may have caused the loss. In order to recover damages, the plaintiff must prove that damages were caused by the defendant with reasonable certainty. The plaintiff also has a duty to mitigate damages and to take reasonable steps to overcome the loss by substituting or replacing sales with alternatives. The CPA should understand plaintiff's efforts to mitigate, and the impact on the measure of the loss.

Summary

The calculation of lost profits is a projection of plaintiffs "but for" revenues less the actual profits plaintiff earned during the damage period. Avoided costs associated with the lost revenues are subtracted to arrive at net lost profits. Future lost profits are discounted to present value, using an appropriate discount rate. The CPA's damage calculations should be credible and supportable. The methods and procedures used should be clearly defined, related to relevant facts and assumptions and tied to the underlying cause of the damage.



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This article was originally published in the ASCPA eNews.