

Quantifying Damages for Lost Profits – *Estimating Costs*



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Where a business' profits are impaired as a result of the illegal conduct or wrongdoing of another party (defendant) in breach-of-contract cases or in tort, the damages expert will quantify the damages for plaintiff's lost profits and other related adverse effects caused by the event.

This article will address the expert's calculation of the costs that are applied against a plaintiff's lost revenues in economic damages quantification.

The circumstances surrounding the particular claim for recovery of damages will determine the specific type of claim that is filed, whether it is in respect of breach of contract, loss of business opportunity, business interference, etc. Damages for lost profits are recoverable only to the extent that the breach or tort, as the case may be, was the proximate cause of the loss, the burden of proof being on the plaintiff. While the plaintiff's burden is to present the best possible evidence, the courts recognize that damages for lost profits cannot be, nor must they be, proven with absolute certainty.

In attempting to prove the quantum of lost profits and related injurious effects, the plaintiff must present and support a reasonable basis for the calculation of damages.

METHODOLOGY

Whatever type of claim is made (except perhaps for breach of contract, which may be subject to certain terms and provisions of the contract itself, including liquidated damages), lost-profits determinations typically adopt one of the following three approaches:

a) *The Before-and-After Approach*

This approach is generally best suited

to a business having an established track record of operations or pattern of activity. It compares actual (adversely-affected) operating results during the damage period to normalized, *but-for* results. Adopting this approach, the expert estimates, or extrapolates, plaintiff's *but-for* results during the damage period based on (a) normalized actual results experienced by plaintiff *prior* to defendant's alleged damaging acts and (b) normalized actual results *after* the injurious effects of the event have subsided. The plaintiff's adversely-affected, actual results during the damage period are compared to the pre- and post-damage periods' actual results, which serve as "benchmarks", considering seasonality, cyclicity, and any non-recurring or unusual items, as applicable.

b) *The Yardstick (Comparable)*

Approach

The Yardstick Approach may be suitable if the plaintiff's business does not have a sufficiently long historical track record and, consequently, the Before-and-After Approach is not feasible.

Adopting this approach, the expert compares the plaintiff's adversely-affected results during the damage period to those of similar or "comparable" companies ("guideline companies"), if available, or to industry performance which may serve as a yardstick, and reconstructs the operating data of the plaintiff on a *but-for* basis. In this regard, the damages expert analyzes available financial and operating data of the guideline companies. Adjustments are then made, as appropriate, to the respective financial data of the plaintiff and of the guideline companies so as to minimize any material differences in accounting poli-

cies or practices as well as business or industry conditions. Non-recurring, unusual, extraordinary, and discretionary items are also adjusted, as necessary.

In the case of a start-up business, there is a higher standard of proof of damages because there is no historical track record to look to in estimating lost profits.¹

c) *The Sales Projections ("But-For")*

Approach

Adopting this approach, a model is created for the damaged business, based on assumptions as to how the plaintiff would have performed *but-for* the adverse effects of the defendant's alleged wrongdoing. Accordingly, plaintiff's projected sales and profits are estimated during the damage period based on such assumptions. These *but-for* results are then compared to the actual, adversely-affected results of the

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expert TIP

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plaintiff during the damage period. This article addresses the Sales Projection ("But For") Approach.

SALES PROJECTIONS ("BUT-FOR") APPROACH

Because this methodology requires the creation of an economic model that includes sales projections along with related net profit estimates, a proven historical track record to support the projections and profits will help convince the court, notwithstanding that there may be available empirical data and industry publications forecasting industry growth and profitability.

The courts will award damages for lost profits of an unestablished business provided they can be proven with reasonable certainty.² Cases distinguish between (a) a *new* business and (b) a new product or new venture of an *existing* business.

While it is more difficult to meet the standard of "reasonable certainty" when there is no past history of profits (say, in a start-up operation), the courts will often make an award if the quantification does not involve speculation.

The plaintiff's lost profits will be calculated as the excess of (a) the projected *but-for* operating results over (b) the actual results during the damage period. If the *value* of the business as a capital asset has suffered, such loss is also taken into account, provided that there is no double-counting, i.e., the aggregate of the lost profits during the damage period and the decrease, if any, in the value of the business cannot exceed the capitalized value (or discounted present value) of the estimated future profits to be generated by the business, calculated immediately prior to the defendant's wrongful conduct.

The traditional statement of operations (income statement) presents the *accounting profit* of the business. However, in measuring lost profits in commercial or civil litigation, the plaintiff's financial statements are merely a starting point. In damage claims, the lost-profit damages asserted are the lost profits suffered by the plaintiff as a consequence of the

alleged wrongdoing of the defendant. Accordingly, the loss of gross revenues is determined and the *lost profits* on those revenues are calculated. The lost revenues minus the related incremental and direct costs incurred to generate the sales equal the lost "contribution margin" or lost "incremental income." That is, for each sales dollar lost, the effect on the net (pre-tax) profit of the business is calculated. Generally, lost contribution margin (see below) equals "lost profits" for damage-quantification purposes.

ESTIMATING COSTS

Estimating costs is essential to any lost-profits quantification. Once the loss of sales volume caused by defendant's wrongful conduct has been established (estimated) with reasonable certainty, the loss of profit thereon (sales minus related incremental costs) must be determined, as damages relate to lost *net profits* on a pre-tax basis. However, costs are rarely known or ascertainable with any degree of precision. Even an examination of the plaintiff's books of account or accounting records used to prepare the annual financial statements may not provide an adequate picture of the cost patterns of the plaintiff's business. The business valuator or damages expert must therefore analyze the plaintiff's cost patterns with respect to the "variable" and "fixed" components (see below).

In quantifying damages for lost profits, the expert will use the plaintiff's historical financial (including cost) data as a basis for estimating the incremental costs relating to the *but-for* sales. The issues of the case often require the expert to estimate a complex set of costs for a specific situation, which may be different from cost data in the plaintiff's accounting system. The expert will rely on internal company data, discussions with management, and empirical data gleaned from industry and government sources.

CATEGORIES OF COSTS AND EXPENSES

The cost pattern relating to a business'

operations is typically divided among the following three categories:

- *Variable Expenses* - Expenses that vary in direct proportion to gross revenues or level of activity (e.g., hourly royalties, wages, sales commissions, etc.).
- *Fixed Expenses* - Expenses that are fixed in amount regardless of gross revenue. Some may be fixed to the extent that they will not vary up to a certain gross revenue limit (e.g., rent or insurance); if the revenues are increased above that limit, these expenses will increase, but may remain fixed at the higher amount up to the new gross revenue limit.
- *Semi-Variable Expenses* - Expenses that are part way between fixed and variable and may comprise fixed and variable components (e.g., telephone charges having a fixed monthly component plus a variable component related to long-distance usage). These types of expenses often occur because the relationship between cost and volume is not regular but takes the form of a "step" function, i.e., they may change at certain increased activity levels (production volume, inventory storage requirements, truck fleet).

As most variable costs can be directly traced to the product itself, cost allocation issues can arise with respect to (a) fixed costs and (b) certain variable components of manufacturing overhead.³ As fixed costs are usually incurred for the benefit of the entire business entity as a coordinated unit, for general accounting purposes most fixed costs require allocation by the accounting staff to processes, departments, divisions, products or some other identifiable unit or profit center of the enterprise.

The specific costing method used in determining the costs and expenses on the lost sales can affect the calculation of "lost profits." Plaintiff's proof of loss of profits (being loss of *net pre-tax profits*) requires proof regarding gross revenues *and* related expenses.⁴

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LITIGATION SERVICES - Damages for Lost Profits, continued

The accounting nomenclature for these alternative methods is "absorption costing" and "direct costing."

ABSORPTION COSTING V. DIRECT COSTING

Assuming that the plaintiff operated a manufacturing business, the different costing methods would produce the following results.

Absorption costing, or conventional costing, would treat *all* manufacturing costs as product costs; the fixed and variable cost elements would be co-mingled in such a way that the manufactured end-product would "absorb" all manufacturing costs. Under absorption costing, therefore, the fixed production costs would be allocated to the product and become part of Cost of Sales (see Table 1 below). In absorption costing, costs are seldom classified as fixed or variable.

Direct costing (also referred to as variable costing, marginal costing, or incremental costing) has a different impact on net profits because fixed manufacturing expenses are considered *period costs* rather than *product*

costs. More specifically, direct costing includes actual prime costs plus pre-determined *variable* manufacturing overhead. *Fixed* manufacturing overhead is excluded. Also, other variable expenses are deducted in applying the direct costing method. Accordingly, under direct costing, increases or decreases in units sold will result in proportionate increases or decreases in incremental income because only variable costs are assigned to the cost of units produced. Under direct costing, the emphasis is placed on the number of units sold, and the income or loss will accordingly move in the same direction as the sales volume. In an incremental-income analysis, the question is therefore: "What does it cost to produce one more unit?", or, "How much is saved by producing one less unit?" Accounting net income or net loss does not increase or decrease in direct proportion to sales volume because fixed costs per-unit do not remain constant.⁵

Damages for lost profits require the determination of *net profits* lost; therefore the plaintiff's Cost of Sales is only a starting point, because variable

expenses included in general and administrative (i.e., non-manufacturing) overhead must also be deducted (from Gross Profit). For example, sales commissions, wrapping supplies, and delivery expenses would vary in direct proportion to the *but-for* incremental sales. The factory rent would not.

In summary, the difference at the manufacturing level between the results obtained by applying an *absorption costing* method versus a *fixed costing* method arises from the amount of fixed manufacturing costs allocated to the work-in-process and finished goods inventories of the business. On Table 1, ending inventory is \$6/unit under *direct costing* and \$8/unit under *absorption costing*.

In the example, lost profits would be \$3,600 applying a direct costing method and \$1,100 applying absorption costing.

As noted on Table 1, in direct or incremental costing, lost profits are generally calculated as the loss of "contribution margin" (i.e., loss of incremental profits) on the lost sales. The contribution margin of a product, *Continued on next page*

Table 1
**COMPARISON OF ABSORPTION AND DIRECT COSTING
PLAINTIFF COMPANY
CALCULATION OF LOST PROFITS DURING THE DAMAGE PERIOD**

<i>Absorption Costing</i>			<i>Direct Costing</i>		
Lost sales - 1,000 units @ \$10		\$10,000	Lost sales		\$10,000
Cost of sales	<u>Unit Cost</u>		Variable manufacturing costs of goods produced	\$6,600	
• Variable manufacturing costs 1,100 units	\$6	\$6,600	Less ending inventory (100 units @\$6)	<u>600</u>	
• Fixed manufacturing costs	2	<u>2,200</u>	Variable manufacturing costs of goods sold	\$6,000	
Cost of goods available for sale	\$8	\$8,800	Variable selling and administrative expenses	<u>400</u>	
Less ending inventory	<u>8</u>	<u>800</u>	Total variable costs charged against sales	<u>\$6,400</u>	
Gross margin		\$2,000	CONTRIBUTION MARGIN (LOST PROFIT)	<u>\$3,600</u>	
Less total selling and administrative expenses (i.e., expenses saved), including variable portion of \$400		<u>900</u>	Less fixed costs:		
NET INCOME (LOST PROFIT)		<u>\$1,100</u>	• Fixed manufacturing costs	\$2,200	
			• Fixed selling and administrative expenses	<u>500</u>	<u>2,700</u>
			NET INCOME		<u>\$ 900</u>

sion, or profit center (such as a retail store outlet) is the excess of *total gross revenues* attributable thereto over the related *total variable costs*, such excess contributing towards the company's total fixed costs.

The example demonstrates that the key area in determining loss of profits (i.e., loss of contribution margin) relates to the distinction between "fixed costs" and "variable costs." Variable costs associated with the lost sales are what must be deducted.

There are typically differences of opinion between opposing experts as to what costs are truly "variable" and therefore "deductible" in arriving at lost contribution margin. As noted above, some costs have both fixed and variable components (such as light, heat and power, where higher production volume requires more utility costs in the manufacturing process; or production labor may increase with increased production as a result of overtime, etc.). Fixed, or overhead, expenses are deductible provided (and to the extent) that there would have been an increase in such expenses in order to generate the *but-for* revenues. For example, delivery expenses (delivery wages, vehicles, etc.), clerical salaries, electricity (if extra shifts are working), etc. — even though classified as "fixed" expenses for accounting purposes — are, to an extent, variable.

Whether an expense is fixed or variable may differ from industry to industry and it is usually in examination-for-discovery that the expense characteristics can be better understood. The bottom line, of course, is



that the higher the variable costs, the lower the contribution margin or lost profits.

With respect to depreciation, there are cases that require it to be deducted in quantifying lost profits (in addition to administrative expenses, payroll, and maintenance that would be incurred).⁶ The courts have been divided as to whether a portion of plaintiff's overhead costs and expenses should be deducted from gross revenues. Most courts have not found favor in deducting or allocating fixed overhead in the calculation of lost profits damages.⁷ There are further issues that must be considered such as (but, of course, not limited to) owner's compensation, income tax considerations, and the damages recovery period itself. For example, lost profits should be calculated pre-tax to avoid double taxation.

CONCLUSION

While an analysis of the foregoing factors must be performed by the damages expert, whether acting for a plaintiff or defendant in a lost-profits damages case, the expert should consult with the client's attorney at the very outset to be properly apprised of the relevant facts, the requisite measure of damages, and the recovery theory under which damages are being claimed. ☞

¹ *O'Neill v. Warburg, Pincus & Co.*, 39 A.D. 3d 281, 833 N.Y.S. 2d 461 (2007).

² See, for example, *Hiller v. Manufacturers Product Research Group of North America, Inc.*, 59 F.3d 1514 (5th Cir. 1995) (Texas); *Mid-America Tablewares, Inc. v. Mogi Trading Co.*, 100 F.3d 1353 (7th Cir. 1996); *Ashland Management, Inc. v. Janien*, 82 N.Y.2d 395, 604 N.Y.S.2d; *Amigo Broadcasting, LP v. Spanish Broadcasting System, Inc.*, 521 F.3d 472 (5th Cir. 2008) (Texas).

³ *Autotrol Corp. v. Continental Water Systems Corp.*, 918 F.2d 689 (7th Cir. 1990).

⁴ *R & I Electronics, Inc. v. Neuman*, 66 A.D.2d 836, 411 N.Y.S.2d 401 (1978).

⁵ Under absorption costing, emphasis is placed on both production and sales, and net income and net loss do not, therefore, show the expected relationship to sales.

⁶ *South Plains Switching, Ltd. v. BNSF Railway Co.*, 255 S.W.3d 690 (Texas App. 2008).

⁷ Robert L. Dunn, *Recovery of Damages for Lost Profits*, Vol. 1, 6th edition, Lawpress Corporation (Westport, CT: 2005 with Supplements to September 2010), p. 483.

has been able to express their feelings/issues will not lead to an agreed-upon settlement. If one side does not feel heard or acknowledged, the trust they have in you and your suggestions for resolution will decrease dramatically.

Understanding the parties before entering mediation plays a significant role in assessing the source of resolution gridlock (pressure, pride, health, fairness, financial worries, etc.) for each party involved. This indicates the threshold to break through for a successful mediated outcome. In this real life example, the financial mediator suggested an Employee Stock Ownership Plan to acquire the minority shareholders shares and a tax-deductible retirement plan for the employees. This provided the momentum the parties needed to reach agreement. If not for the mediator's impartiality, this innovative resolution may not have been brought to the table. That is how effective you — as the financial professional — can be to the mediation process.

With you as the trusted financial leader in mediation, participants can enter the process with more trust and cooperation as well as a more positive attitude toward the possibilities for an equitable settlement resulting from their inputs. The patience, care, skill and expertise the financial specialist integrates into the collaborative process may change the tone of the parties' negotiation and the reasonableness of their chosen outcome. Your financial expertise and experience can expedite a successful resolution with more satisfying results and less emotional stress than courtroom litigation. In mediation, there may be no right and wrong answer, but a skilled financial neutral can introduce objective and creative alternatives to difficult financial situations. ☞