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ACCOUNTANTS & ADVISORS

VALUATION AND LITIGATION BRIEFING

DISCOUNTED CASH FLOW: HANDLE WITH CARE

Valuators and damages experts commonly use the discounted cash flow (DCF) method to determine business value or calculate lost profits damages. The DCF method is a powerful tool, in part because it's forward-looking. But because the method incorporates several assumptions based on subjective judgment, courts tend to scrutinize DCF calculations. Typically, courts demand that valuation experts explain these assumptions as well as demonstrate they are based on market-derived evidence and align with the facts of the case.

How DCF works

In using the DCF method, a valuator measures value or lost profits based on a company's expected future financial performance. Historical performance is relevant only to the extent that it provides insight into trends and future expectations.

At the same time, the valuator relies on several key assumptions, including cash flow projections, growth rates and discount rates. Each of these assumptions involves some element of subjective judgment, so each could be susceptible to manipulation in an effort to reach a desired result.

An appraiser begins by projecting future cash flows over a particular time horizon — sometimes up to five or 10 years. He or she then discounts those cash flows to present value. The discount rate reflects the time value of money and also reflects the level of risk associated with an investment in the business.

The next step is to calculate a terminal, or residual, value — that is, the company's estimated value at the end of the projection period. A valuator may use a few different approaches to determine the terminal value. One common approach is to assume that a company's cash flow will continue to grow at a constant rate into perpetuity. The valuator then calculates the present value of those cash flows at the end of the projection period.

Another approach is to use an exit multiple model. A valuator employing this approach determines terminal value using a multiple — typically derived from transactions involving comparable companies — of some earnings or cash flow measure. After deriving the terminal value, the expert discounts it to present value and adds it to the net present value of projected discrete annual cash flows to arrive at a value for the business.

Key assumptions

It's important to note that the accuracy of the DCF method is only as good as its underlying assumptions. These include:

Cash flow projections. Valuators examine several factors when projecting cash flows, including the past financial performance of the business or of similar businesses, prevailing economic and industry conditions, company specific opportunity and risk factors, anticipated costs, working capital needs, and expected growth rate.

Often, experts rely on projections that management has prepared in the ordinary course of business. Indeed, many courts find management projections to be the most reliable predictors of future cash flows, given management's intimate knowledge of the business, the industry and the market. But courts are suspicious of, and may reject, management projections prepared outside of the ordinary course of business, particularly if the likelihood of litigation creates an incentive to manipulate the results.

Discount rate. It's customary for a valuator to determine the discount rate based on the company's weighted average cost of capital (WACC) or equity cost of capital. WACC incorporates the costs of both equity and debt to determine a discount rate that reflects the company's overall capital structure.

(See “What’s the cost of capital?”). If a company does not have debt, then an equity cost of capital is used.

Given the level of subjective judgment involved in determining the discount rate, and the significant impact of even small variations, this is an area ripe for manipulation. Suppose, for example, that a business has projected cash flows of \$10 million per year over the next 10 years. Using a 10% discount rate and assuming simple annual compounding, the present value of those cash flows is approximately \$61.4 million. Reducing the discount rate to 8% increases the present value by \$5.7 million, to \$67.1 million.

Terminal value. Estimates of terminal value may vary substantially depending on which model experts choose and which inputs (for example, growth rate, multiple, discount rate) they select.

Explain, explain, and explain

Application of the DCF method involves a variety of assumptions and significant judgment. To pass muster with the courts, experts need to clearly explain the reasoning behind their assumptions and show how their analyses align with the facts and circumstances of the case.

SIDEBAR: WHAT’S THE COST OF CAPITAL?

The weighted average cost of capital (WACC) is the combined cost of a company’s debt and equity capital. Typically, the debt component is based on the company’s actual borrowing costs (adjusted to reflect the tax benefits of interest deductions). To determine the cost of equity, a valuator usually uses approaches — such as the capital asset pricing model (CAPM) or the build-up method — that involve identifying a “risk-free” rate of return and adding market-based and company-specific risk premiums.

A key assumption in calculating WACC is the capital structure — the relative percentages of debt and equity that form the basis for weighting. When valuing a minority interest, experts usually use the subject company’s *actual* capital structure. A company’s *actual* capital structure takes into consideration

the fair market value of its debt and equity, and not the historical cost of such items. Thus, a company's capital structure may be very different than that presented on audited financial statements.

When valuing a controlling interest, experts often use the company's *optimal* capital structure, under the theory that a controlling owner has the power to change it. To determine the optimal structure, experts may look to industry averages, capital structures of comparable companies or lenders' debt-to-equity criteria.

FINDING THE VALUE OF A NONCOMPETE AGREEMENT

Noncompete agreements can help businesses retain valuable employees, safeguard inside information and prevent unfair competition. But although they're designed to protect companies, they can also put them at great risk if they're not properly structured and maintained.

It can be important to determine the value of a noncompete agreement in many situations, including in a business transaction or sale, or for financial reporting or tax purposes. Professional valuers may use several methods to value these intangible assets.

The basics

A noncompete agreement (or "covenant not to compete") is a contract between an employee and an employer. The idea is that the employee agrees not to compete with the employer for a certain time period and within a specified geographic area.

When valuing a noncompete, an appraiser considers several factors. These include the value of the overall business, the probable damages a breach might cause, the likelihood of competition and the enforceability of the noncompete agreement. Damages may be quantified in many different ways, and would ordinarily consider lost revenues, eliminated variable costs, present value considerations, a duty to mitigate, replacement costs and other factors.

Different scenarios

Competition from a former employee or seller who didn't sign a noncompete agreement could potentially force a company out of business. So the value of the entire business represents the absolute ceiling for the noncompete's value. Most likely, a key employee or seller couldn't steal 100% of a business's profits. Plus, tangible assets possess some value and could be liquidated if the business failed.

Thus, the next benchmark is estimating how much business the seller or a key employee could take during the term of the noncompete agreement. Often an appraiser runs two separate discounted cash flow scenarios. The difference between cash flows with and without a noncompete in place represents a second ceiling for the noncompete's value. Factors the valuator considers when preparing the different scenarios include the company's competitive and financial position, business forecasts and trends, and the individual's skills and customer relationships.

Factors to consider

Next, the appraiser multiplies each differential by the probability that the seller or key employee will subsequently compete with the business. If the party in question has no incentive, ability or reason to compete, the noncompete could be worthless. Factors to consider when predicting the threat of competition from a seller or key employee include the person's:

- Age, health, job satisfaction and financial standing
- Postemployment (or postsale) relocation and employment plans,
- Alternative business ventures, and
- Previous competitive experience.

The sufficiency of sales proceeds will also come into play. In addition, the appraiser should ask an attorney whether the noncompete clause is legally enforceable. Generally, noncompete agreements can be enforced only if the restrictions are reasonable. For instance, courts have rejected noncompetes that cover an unreasonably large territory or a long time period.

What's "reasonable" varies from business to business, based on the characteristics of the business, state statutes and case law, and agreement terms. Employers must update agreements regularly and strictly enforce all breaches in accordance with the stated terms. If they don't, their noncompetes may become unenforceable.

Noncompetes help smooth the way

Noncompete agreements can help smooth transitions within companies. They can also help with transactions after a merger or acquisition closes — but only if buyers and sellers are equally satisfied with the financial results. An experienced valuator can provide reassurance that the noncompete agreement is valued appropriately.

LOST PROFITS DAMAGES MUST BE REASONABLE

Warsaw Orthopedic, Inc. v. NuVasive, Inc.

Lost profits proved elusive in this 2015 patent infringement case. At trial, the jury awarded the plaintiff \$101 million for "lost profit damages (with royalty remainder)" in connection with the defendant's infringement of two patents.

But on appeal, while the US Court of Appeals for the Federal Circuit upheld the district court's finding of infringement, it held that the plaintiff wasn't entitled to recover lost profits damages. And, though the plaintiff was entitled to a reasonable royalty, the verdict failed to indicate the portions of the award attributable to lost profits and royalties.

Plaintiff's business model

The litigation focused on two patents, one related to oversized spinal implants and the other related to methods and devices for retracting tissue in minimally invasive spinal surgery. The plaintiff owned both patents but didn't "practice" the patented technologies. Instead, the plaintiff licensed them to two related companies: Medtronic Sofamor Danek Deggendorf, GmbH (Deggendorf) and Medtronic Puerto

Rico Operations Co. (MPROC). Those companies manufactured the patented products and sold them to a third related company, Medtronic Sofamor Danek USA, Inc. (MSD).

The plaintiff accused the defendant of violating its patents, causing the plaintiff and its subsidiaries to lose sales. The plaintiff sought lost profits based on three patent-related income sources:

1. Sales of fixations (rods and screws used to hold implants and vertebrae in place) to MSD,
2. Royalty payments from Deggendorf and MPROC, and
3. True-up payments pursuant to an intercompany transfer pricing agreement.

The appellate court found that the plaintiff wasn't entitled to recover lost profits based on any of the three income sources.

Fixation sales

MSD packaged the patented products and fixations together into medical kits, which it sold to hospitals and surgeons. The plaintiff claimed that the infringement caused MSD to lose medical kit sales, which in turn caused the plaintiff to lose nearly \$28 million in fixation sales.

The plaintiff argued that fixation sales were convoyed sales — that is, sales of unpatented products that are closely related to a patented product. Lost profits are available for these products if they're functionally related to a patented product and not merely packaged together for “convenience or business advantage.” In this case, the plaintiff failed to prove a functional relationship. It didn't, for example, show that the fixations wouldn't work well in surgeries that didn't involve the patented products.

Payments from related companies

The plaintiff claimed the infringement caused Deggendorf and MPROC to lose sales, which in turn reduced the plaintiff's royalty payments from the related companies. Although a patentee isn't entitled to recover a related company's lost profits, the plaintiff argued that it wasn't seeking to recover

Deggendorf and MPROC's damages. Rather, it was asking for royalty payments it would have received but for the infringement.

The court rejected this argument. It explained, "We have long recognized that the lost profits must come from . . . lost sales of a product or service the patentee itself was selling."

True-up payments

Throughout the year, the plaintiff engaged in various transactions with its related companies that didn't necessarily reflect fair market value. Under the companies' transfer pricing agreement, they made "true-up" payments at the end of the year to compensate each other for the fair market value of previously exchanged items. For example, MSD would remit back to the plaintiff 95% of its profits on sales of patented technologies.

The plaintiff argued that its lost true-up payments should be recoverable as lost profits. The court disagreed, finding that the plaintiff failed to show what portion of the true-up payments was attributable to payments for sales of patented products as opposed to payments for unrelated transactions.

Reasonable royalty

The court's rejection of lost profits didn't mean the plaintiff was precluded from recovery altogether. The plaintiff was entitled to reasonable royalty damages and the court ordered a new trial to determine an appropriate amount.

BENEFIT-OF-THE-BARGAIN VS. OUT-OF-POCKET

Calculating damages in fraudulent misrepresentation cases

In fraudulent misrepresentation cases, courts generally apply the benefit-of-the-bargain measure or the out-of-pocket measure of damages. The two measures can lead to dramatically different results, so it's important for attorneys and their damages experts to be on the same page. (Alternative measures may be available in some types of cases, such as securities fraud or breach of contract.)

What's the difference?

Under the benefit-of-the-bargain measure, the defrauded party recovers the difference between the value he or she would have received had the defendant's false representation been true and the actual value received. Under the out-of-pocket measure, on the other hand, the defrauded party recovers the difference between the value he or she has paid (the purchase price or other consideration, for example) and the actual value received.

Here's an example that illustrates the difference. Frank purchases a new boiler for his home from Doug for \$8,000. Doug represents to Frank that the boiler is model X, worth \$12,000, even though he knows that the boiler is model Y, worth only \$6,000. Under the out-of-pocket measure, Frank's damages are \$2,000 — the difference between what he paid (\$8,000) and the value he received (\$6,000). But under the benefit-of-the-bargain measure, Frank's damages are \$6,000 — the difference between the represented value (\$12,000) and the value he received (\$6,000).

Proponents of the benefit-of-the-bargain measure argue that, unless the fraud perpetrator risks losing the "profits" from his or her fraud, there's no disincentive. Proponents believe this method makes the defrauded party whole by restoring his or her prefraud financial position and that the benefit-of-the-bargain measure gives the defrauded party a windfall.

What do courts accept?

Some courts accept whichever measure does the best job of compensating the defrauded party's injuries. In *Lewis v. Citizens Agency of Madelia Inc.*, for example, an insurance agency falsely represented to the plaintiff that she was the beneficiary of her husband's life insurance policy, when in fact he had purchased an annuity.

The court found that merely refunding the premiums the plaintiff had paid wouldn't make her whole, since she had forgone other actions, including purchasing additional life insurance, based on the agency's representations. The court awarded her the life insurance proceeds she expected to receive.

What's the best measure?

The measure of damages in fraud cases has a significant impact on a plaintiff's recovery. Attorneys and their damages experts need to discuss these issues to formulate an appropriate strategy.

PARTNER PROFILE

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Eric Kreuter is a Partner with Marks Paneth's Financial Advisory Services group. He specializes in litigation and forensic services, including commercial damages and fraud investigations, and brings a deep understanding of the challenges faced by the construction industry and its constituents. Eric is also a prolific writer - having authored seven books and numerous articles, including many pertaining to his areas of expertise - and is a sought-out resource throughout the legal community.

Eric is a member of several premier industry organizations - including, but not limited to, the American Institute of Certified Public Accountants, the New York State Society of CPAs, the Institute of Management Accountants, the Association of Certified Fraud Examiners and the National Association of Certified Valuation Analysts.

Eric is a volunteer advisor to the Coalition for Family Justice in Westchester County and Treasurer of the National Association for Poetry Therapy. He is a Stand-by Board Member of the Selective Service System, nominated by Gov. Andrew Cuomo and appointed by the President.

In addition to his professional activities, Eric is an avid runner who has completed 75 marathons to date as he strongly believes in maintaining a high-level of physical and mental fitness.

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Marks Paneth's Financial Advisory Services Group has a reputation for providing litigation, corporate financial advisory, valuation and dispute analysis, labor and employment, intellectual property, trade remediation, compliance, and fraud and forensic accounting services of the highest quality. The group serves a wide range of clients, including law firms, private and public companies, insurance carriers and governmental entities at the federal, state, local and international levels.

Since 2010, readers of New York Law Journal, have ranked Marks Paneth among the top three fraud and forensic accounting providers. For the past three years, the firm was ranked #2.

In Litigation, a Little Tax Planning Pays Off

The economic impact of a settlement or damages award depends on whether it's taxable to the plaintiff and deductible by the defendant. A tax-free \$1 million judgment, for example, is substantially more valuable to a plaintiff than one that comes with a \$400,000 tax bill. And from a defendant's perspective, the ability to deduct a damages payment takes some of the sting out of a loss. By incorporating tax strategies into the litigation planning process, you can help your clients improve their chances of a tax-beneficial outcome.

How are damages taxed?

Generally, a plaintiff's recovery of damages is taxable unless a specific exception applies. In addition to income taxes, damages that represent wages, such as back pay in employment discrimination cases, are also subject to FICA and other employment taxes.

One exception is an award that produces no gain for a plaintiff. This might include an award that reimburses a plaintiff for nondeductible expenses or for damage to, or destruction of, a capital asset, such as real property or stock. In the case of a capital asset, damages are tax-free up to the plaintiff's adjusted basis in the property. To the extent that damages exceed the plaintiff's basis, they're taxable as capital gains.

Another exception is compensation for injuries or sickness excludable from income under Internal Revenue Code Section 104. This includes compensatory damages received "on account of personal physical injuries or physical sickness" under Sec. 104(a)(2). The application of Sec. 104(a)(2) is straightforward in cases involving bodily injury.

Suppose, for example, that Martha is seriously injured in a car accident caused by the defendant's negligence, and recovers damages for medical expenses, pain and suffering, lost wages and emotional distress. Arguably, all of these damages, which flow from the original bodily injury, are tax-free because they're "on account of personal physical injuries."

Things get more complicated in cases involving nonphysical injuries that result in physical injury or physical sickness. Employment discrimination cases, for example, often have a significant emotional distress component that may lead to serious physical illness. But Sec. 104 expressly states that emotional distress shall not be treated as a physical injury or physical sickness (except for medical expenses).

The IRS and courts generally don't apply this exclusion to damages attributable to emotional distress *symptoms*, such as migraines, nausea or insomnia. But some courts have held that damages for

emotional distress are tax-free when it causes more serious physical harm, such as a heart attack or nerve damage, and the plaintiff's condition is supported by a medical diagnosis and testimony.

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