BUSINESS VALUATION UPDATE

TIMELY NEWS, ANALYSIS, AND RESOURCES FOR DEFENSIBLE VALUATIONS

New Articles Ask Us to Rethink the Equity Risk Premium

July 2012

A stream of articles and public commentary in the past couple of months has questioned the validity of the historical equity risk premium.

It started with a March 17 *Economist* analysis of the history of the ERP and asks "what will the future reward for equity investors be?" The first step is to define the ERP more precisely, say the authors of "Shares and Shibboleths: How Much Should People Get Paid for Investing in the Stock Market?" To do this, the authors cite a series of papers published just last year by the Research Foundation of the CFA Institute titled "Rethinking the Equity Risk Premium." The abstract states: "In 2001, a small group of academics and practitioners met to discuss the equity risk premium. Ten years later, in 2011, a similar discussion took place, with participants writing up their thoughts for this volume." The CFA Institute publication presents current thinking among thought leaders on the ERP in a practical style.

Also in the March 17 issue of the *Economist*, the authors of "Too Much Risk, Not Enough Reward" state, "In retrospect, it looks as though the circumstances of the times, rather than the immutable laws of finance, may have been responsible for the size of the premium" and that "the addiction to equities may itself have been part of the reason for the premium's decline."

The *Economist* articles, as well as the fifth annual update of his paper on ERP, prompted Aswath Damodaran (NYU Stern School of Business) to write on the topic in his blog, Musing on Markets.

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"One of my obsessions is the equity risk premium," he admits. "To me, it is the 'number' that drives everything we do." Two events prompted his new post: the *Economist* articles. Damodaran concludes, with emphasis:

> If I had to use a historical risk premium, I would go with the 4.10%, since it is long term, a compounded average, and over a long-term risk-free rate. However, I am much more uncomfortable with the assumption of mean reversion in the U.S. market than I used to be since, in my view, the structural shifts that have come out of globalization have changed the rules of the game. *As a consequence, I no longer use historical premiums in either valuation or corporate finance.... Given the dynamic and shifting price of risk that characterizes markets today, I think it makes sense to compute and use an updated implied equity risk premium in valuation and corporate finance.*

Eric Nath (Eric Nath & Associates) also contributed to this debate in "The Biggest Valuation Myth" in the *Business Valuation Review* (Fall 2011). From the summary abstract:

> The traditional Capital Asset Pricing Model and Build-Up Method have failed to reliably quantify the required rates of return for equity holders. This paper discusses how profoundly business appraisers, the courts, investors, auditors and the general public have been misled into thinking that these methods are valid, and suggests a way forward using an on-line survey method (the Pepperdine University Survey).

"One of the biggest business valuation mistakes is confusing historical equity returns with expected or required equity returns," Nath writes. "More to the point, however, is that while it might be reasonable to assert that past market behavior could *influence* investors' expectations, this tells us nothing about how *much* influence it has, nor does it lead anywhere close to the conclusion that the past is a determinant of investor

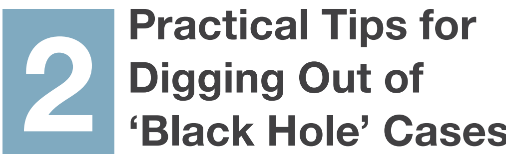
expectations." Instead, he suggests several "better ways" of getting to an estimated return on equity.

The recent economic crisis should also prompt investors and financial managers to revise their views of the equity risk premium, say Stamos Nicholas and Greg Forsythe (both Deloitte), in their new white paper called "Are You Mispricing the Investment Risk?":

> Since the 2008 financial crisis … we have found that managers sometimes do not fully account for the dynamic and variable nature of equity risk premiums when estimating a cost of capital and evaluating potential investments. A common practice by some has been to solely rely on unadjusted historical ERP statistics or anecdotal support for a chosen ERP. Without appropriate analysis and inquiry, these practices can lead to an incorrect pricing of risk in prospective projects.

CFOs and others may want to reexamine how they typically value investments by "dispensing with the myth of the static ERP," the authors conclude. They also cite the benefits of implied ERPs (versus historical estimates) and remind readers that "ERP varies by country markets."

For more information on the ERP debate discussed here, go to the free download page of www.bvresources.com/defaulttextonly.asp?f=downloads and get a list of hyperlinked articles.



2 Practical Tips for Digging Out of 'Black Hole' Cases

July 2012

Any business appraiser who handles divorce valuations knows that the most difficult cases are not the ones with the most complicated assets or capital structures. They'd agree with Joy Feinberg and Donald DeGrazia, who say the most difficult—and draining—are those in which the parties have hit hard economic times due to the crisis—or their own excessive spending habits.

Feinberg, an attorney with Feinberg & Barry (Chicago), and DeGrazia, a CPA/ABV/CFF with Gold Gerstein Group (Morristown, N.J.), were speaking at the recent AICPA/AAML National Conference on Divorce, in Las Vegas.

The hard cases they describe are the so-called "black hole" cases, because the marital assets and incomes cannot provide the parties with a post-dissolution standard of living "even remotely close" to what they enjoyed in the past. The shortage of funds is likely to add fuel to the emotional charge and conflict, which, paradoxically, only adds to their cost, because the legal and expert fees escalate. Feinberg and DeGrazia quote "Stewart's Law" (attributed to Houston CPA Bill Stewart) for the humorous but sadly true proposition:

> Whatever the norm on spending habits in "black hole cases," the standard deviation around that norm is infinity.

Manage the risk *before* you take the case. "Most problems at the back door can be traced to bad decisions or insufficient due diligence at the front door," Feinberg and DeGrazia say. Before accepting any engagement that shows signs of becoming a "black hole," ask to see two years of tax returns for the business plus its most current financial statement.

"I ask clients to bring in these documents prior to taking on a case," Feinberg explains. "I want to know precisely what I'm dealing with." If the client is the "out" spouse, "I want to know what access to information they will have." Is the owner-spouse going to be responsive or resistant? Obtaining documentation early will also help the experts spot the risks of the case, e.g., unexpected assets, unlikely financial ratios, or a heavy debt load.

Despite such troubling signs, appraisal experts will take these cases "for reasons other than their worth," DeGrazia says—preserving attorney referral relationships, for example. If so, it's important to engage in a clear risk assessment of the case, with the attorney and also the client. Feinberg, for example, starts "training" her clients early to understand not only the costs of the case, but also what type of information it will require. DeGrazia will talk to clients about the scope of the work, the type of report, the expected users, and the related cost and payment schedule. The more users and procedures required, the higher the costs and also the risks—and the more a client pursues emotional rather than economic goals, the greater the chance the case will turn into a bottomless black hole.

"While the client has the right to pursue an emotionally unwise or emotional position, we as attorneys and experts have the right to insist on our fees being paid timely and retainers replenished when necessary," the pair of presenters agree. Quoting another colleague, they remind appraisers: "Clients love to gamble with other people's time and money, but become much more prudent when facing a bill for professional services."

Consequently, DeGrazia may try to give the attorney an initial assessment based on his review of the tax returns and financial statements. "There's no report yet" or even a calculation of value for the business, he says, just a conversation with the attorney to decide how to approach the case. Both he and Feinberg recognize the risks attendant to asking an appraiser for a "down and dirty" value, prior to discovery. But "I need to know whether the case is worth my time and the expert's," Feinberg says. "I need a 'ballpark' figure so I can develop a case strategy. I need it to talk to the other side, to see if we're in the same 'ballpark.'"

"What an appraiser has to do under the [BV professional] standards is often in conflict with what the attorney wants," DeGrazia admits. It's always a concern whether a telephone conversation to give an attorney an "idea" of value will fall within the AICPA's SSVS-1, for example. "I have worked with CPAs who say, 'Don't put me in this position,'" Feinberg confirms, "and that's fair. But I still think you need to manage client expectations early on, and I need something in my head to know where this case is going."

Use the engagement contract to control the risks. Educating clients and controlling their expectations in high-risk cases should also be put in writing. Appraisers should review their engagement contracts to make sure they properly identify and/or include the following:

- The parties who will use the report. "We want to know who will be relying on our work," DeGrazia says.
- The party who will pay the fees and any pass-through costs.
- The initial retainer and how it will be applied, along with any additional retainers before testimony at trial.
- The anticipated assumptions and scope of work limitations. For example, a calculation engagement will not result in a professional opinion or conclusion of value and will need to be upgraded prior to any trial testimony.

One appraiser DeGrazia knows puts a time limit on an engagement letter for its acceptance; the client must also provide a signature *and* a retainer, or the firm is not engaged. It's also important to break the work into segments, measured by a particular task and a specific dollar amount: perform the selected segment, get paid for it, and then move on to the next. Alternatively, the expert can perform the work in one- or two-week segments and then send in the bill. Some

of the client's passion for pursuing a particular issue can be reduced by identifying its cost, DeGrazia and Feinberg note. Also, segmenting the work by task or by time can help measure the progress of a case and determine what components of the scope of work are no longer worthwhile and can be terminated.

Quantifying the work will also help the client focus on where to apply limited marital resources. In the initial stages, an out spouse may be convinced that the business has unreported income, personal expenses, or hidden assets. In some cases, this could be true, but if a forensic "trail" appears to be too complex or has gone cold, attorneys and financial experts must re-educate the client. "I've never suggested to any client that I can find it all,'" DeGrazia says, cautioning against letting any client turn the financial forensics into a "game." The decision to go forward with the analysis is the client's, but the risk of nonpayment falls on the professional. "I'll call the attorney and say, 'Let's talk to the client about controlling the cost, keeping the case moving forward, and managing expectations.'"

Some clients will resist such an "education," Feinberg adds. This leaves the professionals with two options: enforce regular and consistent payment or withdraw. (And an expert can get off a bad case more easily than an attorney, DeGrazia notes, because trial attorneys are subject to different ethical and court standards.)

In many cases, however, an expensive forensic analysis of the marital business can be avoided by first obtaining an estimate of unreported business income/personal expenses from the nonowning spouse, then obtaining the same from the propertied spouse. From that information, the experts may be able to stipulate a range of income for the purposes of determining support.

For instance, DeGrazia and Feinberg recount the case of another colleague in which the out spouse alleged approximately $60,000 per year in unreported income and personal expenses funded by the marital business. In a joint interview by both experts, the owner-spouse "suggested" that $20,000 might be more appropriate. With that range as the starting point, the parties eventually agreed on $750 per week, or $39,000 per year, in unreported benefits, thus reducing the costs and conflict of the case (and the risks of such testimony coming out at trial).

Cooperative experts can help control costs. The parties in a divorce may not be able to work together, but often their experts will know and respect each other and can share responsibilities and help reduce the costs of the case, right from the start. The expert for the owning spouse might value the business using certain agreed-on approaches, while the expert for the out spouse might attend the management interviews and site tour with the opportunity to ask questions at both. The "valuing" expert may just prepare work papers and, with the consent of both attorneys, share the work product with the other expert.

In turn, the expert for the out spouse might perform a lifestyle analysis, with access to all marital financial statements and affidavits, while the opposing expert is granted full access and review. Of course, it is important that both parties' attorneys agree to this process and permit the experts to become involved in the discovery process early. The experts should also clearly document any cooperative agreement, its allocation of tasks, and its assignment of financial responsibility (i.e., who will pay).

"We will work with the other expert to raise the [client's] confidence level that the case is getting done in a reasonable, fair way," DeGrazia says.

"You *will* get these 'impossible' cases," Feinberg told AICPA/AAML attendees. "These suggestions will make your life better," she says, and black hole cases more bearable.

3 Valuing Covenants Not-to-Compete: An 11-Factor Checklist

February 2012
By Gary Trugman

The most common approach to valuing a covenant not-to-compete involves a "with and without" analysis, in which the appraiser estimates value based on the difference of two discounted future benefits calculations. A similar method, the lost profits analysis, which projects the present value profits that the acquired company would lose if the seller continued to compete, will reach pretty much the same value. A third method, compensation-based, measures the income that the seller loses due to the CNC, but it is not always appropriate since it does not measure value to the purchasing party.

A covenant not-to-compete (CNC) is an agreement between parties to the sale of a business, by which the seller typically agrees not to compete in the same industry for a specified period of time and within a specific geographic area. A CNC can be part of a large corporate asset sale or divestiture, or it can accompany the sale of a solo professional practice or family business. In either case, the contract for sale may include the covenants, or they can appear in a separate, non-compete agreement.

CNC as an intangible asset. Since a CNC is based purely on a contractual agreement, it has value to the degree that it protects the value of the purchased assets of the business (both tangible and intangible) by restricting the seller's competitive conduct after the sale. As such, a CNC's value is dependent on factors such as:

- The ability of the seller to compete after closing the sale, which may implicate the seller's age, health, professional standing, etc.;
- The derivation of the non-compete; and
- The losses the buyer (company) would suffer if the seller, in fact, competed.

In most cases, an eight-step approach, "with and without," will provide a comprehensive and correct method for valuing the CNC. Except for the last two, these steps may not always follow in sequence:

1. Identify the legitimacy and "economic reality" of the CNC (explained in more detail below).
2. Determine the value of the company assuming enforcement of the CNC. The parties may have already allocated this value in their agreements or in forecasts used to determine acquisition price.
3. Develop projections assuming competition from the selling party, based on historical trends and margins, growth drivers, asset utilization ratios, capital expenditures, etc.
4. Determine the overall value of the company assuming competition from the seller, using the forecasts developed in step 3.
5. Determine the differential between the values derived in steps 2 and 4;
6. Quantify the impact of amortization (tax savings), depending on the purpose and function of the valuation. In effect, once you have valued the CNC, do another projection that uses the deductibility of the CNC amortization to adjust the future taxable income (and thus profits).
7. Calculate the final value of the CNC, with any additional adjustments based on the probability of the seller's competition.

8. Conduct a "sanity check." Does the concluded value make sense, taking into consideration the bigger picture of the business, industry, and other economic factors?

Obviously, the value of the CNC cannot exceed the total purchase price. Analysts can also check for reasonableness by examining the percentage of CNC value to total transaction values of other comparable sales.

11-factor test for economic reality. Many articles have addressed how to determine the "legitimacy" of CNCs. (Keep in mind that legitimacy does not equate to legal enforceability, which requires the opinion of legal counsel.) Several court cases have also developed tests by which to determine the "economic reality" of non-compete agreements. For instance, in *Forward Communications Corp. v. United States*, 608 F.2d 485 (Ct. Cl. 1979), the Federal Court of Claims summarized the four conditions that a CNC should meet to qualify for federal tax amortization:

- *Severability.* Whether the compensation paid for the CNC is severable from the price paid for the acquired goodwill;
- *Anticipated repudiation.* Whether either party to the contract is attempting to repudiate an amount knowingly that they both knowingly fixed or allocated to the CNC;
- *Intent.* Whether there is proof that both parties actually intended to assign a price to the CNC when they executed the sale agreement; and
- *Economic reality.* Whether the covenant is economically real and meaningful.

Several court cases have also developed tests by which to determine the 'economic reality' of non-compete agreements.

Clearly, the facts and circumstances in any individual case are important to consider. The sale documents, agreements, and discussions between the buyer and seller are also vital components to understanding the evolution and import of their deal and whether a CNC has economic substance and legitimacy.

Following *Forward Communications* and the cases cited therein, the Tax Court set forth an 11-factor test to determine the economic reality of a CNC in *Thompson v. Commissioner*, T.C. Memo 1996-468 (1996) (available at *BVLaw*). These 11 points also furnish a good basis for assessing the probability of the seller's competition:

1. *Grantor's business expertise.* What knowledge and skills are necessary to run a competing business? Does the seller (grantor of the CNC) have these requisite skills?
2. *Grantor's intent to compete.* Why did the grantor sell the company? Does the grantor intend to return to the market after the CNC expires?
3. *Grantor's economic resources.* Does the grantor have the financial capacity and resources to compete with the acquired company?
4. *Potential damage to the grantee.* Will the acquired company (grantee) lose business if the grantor chooses to compete?
5. *Grantor's network.* Did the grantor build relationships with customers, suppliers, and other contacts of the acquired business? Did customers and suppliers choose to do business with the acquired company or the grantor?
6. *Duration and geographic scope.* Where did the grantor do business prior to the sale of the company? Does the CNC adequately

restrict the grantor from competing in this area?

7. *Enforceability.* Does state law permit the enforcement of the CNC? Are the consequences for breach of the non-compete agreement legal?

8. *Age and health of the grantor.* Given the age, health, and retirement prospects of the grantor, is it reasonable that he or she will be able to compete with the acquired company?

9. *Payment terms.* How do the sale agreements measure payments to the grantor? If they require payment over the term of the CNC, and if there is more than one selling shareholder, are those payments pro rata by ownership interest to all shareholders? Or is payment measured by contributions to the company prior to acquisition?

10. *Payment duration.* If the sale agreements require payment over the term of the CNC, what happens to that obligation should the grantor die or breach the contract?

11. *Negotiations.* Did the parties "vigorously" negotiate the terms and value for sale of the company and its assets?

Final check. This article is intended to provide a summary overview of the key issues surrounding CNC valuations and a practical approach to use when valuing such an asset. As with all other aspects of valuation, analysts must carefully consider all the particular facts and issues, conduct the proper research and due diligence, and measure the reasonableness of all inputs they have used to determine the value of the CNC.

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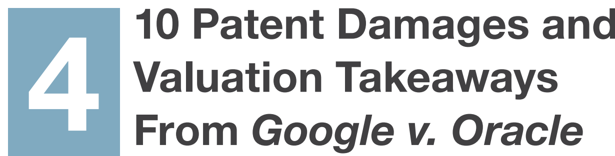

4 10 Patent Damages and Valuation Takeaways From *Google v. Oracle*

August 2012
By Steven R. Hansen

In the hard-fought litigation between Google and Oracle, two district court opinions were issued in March that address patent reasonable royalty damages methodologies in detail: *Oracle America, Inc. v. Google, Inc.*, 2012 U.S. Dist. LEXIS 33619 (N.D. Cal. 2012) (Oracle I), and *Oracle America, Inc. v. Google Inc.*, 2012 U.S. Dist. LEXIS 35393 (N.D. Cal. 2012) (Oracle II) (both have been digested and are available at *BVLaw*).

The opinions provide guidance for satisfying the increasing level of scrutiny applied to analyses of reasonable royalty patent damages by the Federal Circuit Court of Appeals. This article offers 10 key takeaways from Oracle I and II.

Background of Oracle I and II. Oracle claims that Google's Android mobile phone operating system infringes certain patents and copyrights directed at several smartphone features. The patents and copyrights are a small subset of Oracle's mobile phone IP portfolio, which it acquired from Sun Microsystems. Prior to trial, Oracle submitted several expert reports on damages issues, which Google challenged as insufficiently reliable under *Daubert*. Oracle's experts relied on a $99 million offer Sun made to Google in 2006 to license an IP bundle, which included copyrights and six patents that Google allegedly infringed. The IP bundle also included a large number of patents and copyrights that were not at issue in the case.

Oracle's expert sought to use the 2006 license offer to arrive at a reasonable royalty for the infringement of the six patents asserted against Google. Prior to issuing Oracle I and II, the court

struck two of Oracle's damages reports. Thus, in Oracle I and II, the court considered Oracle's third attempt to offer an admissible expert damage opinion and properly apportion the value of the Sun IP bundle attributable to the patents and copyrights-in-suit.

Oracle's expert relied on two apportionment methodologies: 1) the "group and value approach"; and 2) the "independent significance approach." In the group and value approach, Oracle engineers reviewed 569 smartphone platform patents that would have been included in the Sun IP bundle and categorized them into 22 nonoverlapping technology groups. The engineers then rated the patents in each group on a three-point scale based on their respective contributions to desirable smartphone features such as startup, speed, or footprint.

From there, the Oracle engineers counted the number of patents ranked with a "1" in the "purportedly top-three technology groups," arriving at 22 top patents. Three of the six patents asserted by Oracle were part of this group of 22. Oracle's expert further concluded that the three patents-in-suit identified by the Oracle engineers were the most valuable because Google had "decided to infringe" them. To value the top 22 patents, Oracle relied on studies of third-party patent portfolios to determine what portion of the overall value of the Sun Java mobile patent portfolio in the Sun IP bundle should be attributed to the top 22 patents.

Oracle's expert also offered the independent significance approach as an alternative to the group and value approach. Oracle's expert opined that "at least" 37.5% of the value of the 2006 offer was attributable to the asserted patent claims and copyrights. To rebut Oracle's damages claims, Google's experts sought to use a forward citation analysis to determine the value of the patents-in-suit and also relied on an internal Oracle accounting department document that valued the IP bundle for financial reporting purposes. The document was prepared after Google's alleged infringement.

10 key takeaways. Litigants are in uncharted territory when they try to satisfy the evolving and increasing levels of rigor required to establish patent infringement damages, especially those based on a reasonable royalty model. Here are some key takeaways from the Oracle opinions:

1. Methodologies are case-specific and general rules are hard to find.

Appropriate methodologies for determining the value of asserted IP are necessarily dependent on the evidence that is available. For example, Oracle based its analysis on Sun's 2006 offer to license the Sun IP bundle to Google. Google based its analysis on an internal Oracle accounting evaluation prepared for financial reporting purposes. The methodologies adopted by each expert necessarily depended on these documents. In any particular case, such documents may not exist, which may necessitate the development of an alternate methodology. Thus, there is no one-size-fits-all approach.

2. The line between credibility and reliability is blurry.

District courts are required to act as a "gatekeeper" and ensure that expert opinions are the product of reliable principles and methods. However, certain critiques of an opinion may really involve credibility issues or factual disputes that should be decided by the jury. The Oracle opinions reveal that it is difficult to draw the line between a reliability issue for the judge and a credibility issue for the jury. For example, Oracle relied heavily on the analyses of its own engineers to arrive at the patent rankings that its expert relied on. However, this was determined to be a credibility issue for the jury, not a reliability issue for the court. In contrast, the court held that Oracle's expert could not testify concerning his opinion that three of the patents-in-suit

were the most valuable of the top 22 identified by the Oracle engineers because the logic behind the opinion was "too thin." The court is likely to dismiss challenges to opinions that are characterized in credibility terms as usurping the role of the jury.

3. Opinions should be vetted for errors of law.

Google's expert sought to opine that any reasonable royalty damages awarded to Oracle should be limited to the revenues that Google would have obtained if it had obtained a license for the IP at issue. The court struck the opinion on the grounds that it was contrary to established case law holding that an infringer is not entitled to make a profit.

The court noted that Oracle's expert selected fewer than one-quarter of the 39 smartphone features identified as important in his own focus-group research.

4. Opinions should be vetted for internal inconsistencies.

The court struck certain Oracle opinions based on internal inconsistencies. For example, Oracle's expert selected three of the patents-in-suit as the most valuable patents from among the 22 that Oracle's engineers concluded were the most valuable in the Sun IP bundle. The expert reasoned that because Google "chose" to infringe them, these three were the most important patents in the bundle. However, the court struck the opinion, stating that the other three patents-in-suit were not even among the top 22, notwithstanding the fact that Google allegedly "chose" to infringe them as well.

5. Claim-by-claim apportionment may not be required.

Patent infringement is assessed on a claim-by-claim basis. An accused infringer may be found to have infringed certain claims, but not others. In a prior opinion, the court took Oracle to task for not apportioning the value of the Sun IP bundle on a claim-by-claim basis. However, in Oracle I and II, the court reversed course, noting that U.S. Patent & Trademark Office rules presume each patent to be directed to a single invention.

6. Consumer surveys may be used to separate the value of patented and unpatented features.

The court held that consumer surveys "are not inherently unreliable" for separating the value of patented and unpatented components of a product. Oracle's expert asked survey respondents to choose between side-by-side smartphone profiles, each having varied levels of functionality with respect to seven smartphone features. The expert then regressed the data to arrive at an estimate of the feature's contribution to Android's market share.

The court struck Oracle's calculation of the effects of each of the seven smartphone features on market share. In particular, the court noted that Oracle's expert selected fewer than one-quarter of the 39 smartphone features identified as important in his own focus-group research. The court also held that the survey data suggested that survey respondents were indifferent to a $100 increase in price, suggesting the failure to control for all relevant variables. The court allowed the use of a portion of the survey analysis that did not suffer from this defect.

7. Forward citations* may *be used as an indicator of patent value.

Patents with significant disclosures may be expected to be cited frequently in the prosecution of future patents. Such citations are known as "forward citations." Google's expert looked

at the forward citations for each of the top 22 patents in the Sun IP bundle to assess their value. The court at least implicitly approved of this technique and struck Google's forward citation analysis with respect to only one patent on the basis that it was a reissue patent and that Google failed to account for the forward citations of the patent's predecessor patent.

8. Post-infringement evidence* may *be considered to establish a reasonable royalty.

The relevant period for a reasonable royalty analysis is before infringement occurs. Nevertheless, the court allowed Google to rely on a document prepared by Oracle's accounting department after the alleged infringement that calculated the fair value of Sun's core technology (including the patents in suit). The court held that the document could be relied upon because it could shed light on the reasonableness of the experts' royalty estimates.

9. The group and value method may be used to establish a reasonable royalty.

As explained previously, one of the valuation techniques used by Oracle's expert is known as the group and value method. Oracle's expert calculated an "upper bound" and a "lower bound" using this approach. The upper bound was stricken because it relied on the assumption that three of the patents-in-suit were among the most valuable of the top 22 identified by Oracle's engineers (see Takeaway 4). However, the expert's opinions based on the group and value method were otherwise allowed.

10. Third-party patent studies may be used to apportion the value of a patent portfolio.

Oracle's expert relied on value distribution curves for third-party patent portfolios. The court allowed this methodology, but offered its own statistical criticism of the variance in the data Oracle relied upon. Nevertheless, Google did not raise this challenge, so the court did not strike Oracle's reliance on the studies.

Conclusion. Litigants continue to strive to satisfy the increased Federal Circuit scrutiny of analyses of reasonable royalty damages. The takeaways in Oracle I and II may provide needed guidance in this evolving area of the law.

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5 View from Tax Court: *Daubert*, DCF, and Five 'Red Flags' for a Report

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Relevance and reliability: two simple concepts that have become increasingly difficult to interpret in the era of *Daubert* and ever-evolving BV professional standards, approaches, and analytical techniques. In BVR's 4th Annual Tax Summit, held last fall and hosted by the Georgetown University Law Center in Washington, D.C., we gathered a panel of preeminent Tax Court jurists to try to "meld the practical aspects of presenting expert witness testimony in Tax Court with some of the technical issues that the court may see relative to the valuation of closely held businesses and related interests," as moderator Jay Fishman (Financial Research Associates) said in his opening remarks.

Unique aspects of Tax Court. As a first matter, the judges recounted the ways in which the Tax Court rules and procedures are distinct:

- Although headquartered in Washington, D.C., the Tax Court holds trials in 75 different locations (see www.ustaxcourt.gov/dpt_cities.htm). Each of the 19 presidentially appointed judges travel to roughly 13 trials per year before returning to D.C. to write the opinions.

- By statute, the Chief Judge reviews the opinions to decide whether to release them as a Tax Court Memorandum, which will apply only to its facts and cited legal principles, or refer them to all 19 judges for release as a Tax Court Opinion, which will serve as precedent in future tax cases, unless overturned.

- Trial court decisions are appealed to one of the 12 U.S. Circuit Courts of Appeals, based on where the original trial was held (usually where the taxpayer resides). At trial, the tax judges are bound by the rules of the governing circuit to the extent that they fall squarely within Tax Court precedent. If that circuit has not yet addressed an issue, then the tax judges will vote whether to follow Tax Court precedent or perhaps the precedent of another circuit.

"Most valuation cases will be issued as T.C. Memos because they are so dependent on the facts of the case," commented Judge Mary Cohen. If the case concerns a principle of law that is subject to some dispute, however, then the court will likely issue it as a T.C. Opinion. One recent example: *Boltar v. Commissioner*, in which the court ruled that the *Daubert* standard applied in bench trials as well as jury trials. Although that opinion, written by Judge Cohen, rejected a conservation easement appraisal under *Daubert*, its precedent clearly has import for all tax valuations—as does the court's "warning" that it will no longer tolerate substandard expert testimony (see the critical excerpt in the accompanying sidebar).

Credentials and 'going beyond the four corners' of the report. Another unique aspect to Tax Court practice: Rule 143(g) T.C.R., which limits an expert's direct testimony to the contents of his or her report. (Rule 143 is available as a free download at BVResources.com; for a complete list of Tax Court rules and procedures, visit www.ustaxcourt.gov/notice.htm.)

"Normally, we do not allow the expert to give further direct testimony," said Judge Julian Jacobs, unless the expert needs to correct the report, based on information gained after its execution. After presentation of this direct testimony, the opposing side may cross-examine the expert, and that's "where you get into the guts of the whole system," Judge Jacobs said, as your opponent tries to diminish the report's credibility, which the expert will have only a limited opportunity to resuscitate on redirect.

"My qualifications go in my report," observed Fishman. "Do I have an opportunity to discuss them?" More importantly—how do the judges view an expert's credentials, and what challenges have they entertained?

Warning to all appraisal experts: Tax Court will apply *Daubert*

"The Court's gatekeeper function in a bench trial serves to increase the efficiency of trials and the objectivity of judgments. After decades of warnings regarding the standards to be applied, we may fairly reject the burden on the parties and on the Court created by unreasonable, unreliable, and irrelevant expert testimony. In addition, the cottage industry of experts who function primarily in the market for tax benefits should be discouraged. Each case, of course, will involve exercise of the discretion of the trial judge to admit or exclude evidence. In this case, in the view of the trial Judge, the expert report is so far beyond the realm of usefulness that admission is inappropriate and exclusion serves salutary purposes." *Boltar v. Commissioner*, 136 T.C. No. 14 (April 5, 2001)

"To qualify the [expert] witness, I will allow counsel to question the witness about his or her credentials," said Judge David Laro. "Sometimes you can solicit matters from the witness in live testimony that may not be in the report," and that may help the court as trier-of-fact. All experts need to demonstrate in some fashion that "their credentials are, in fact, focused in on the issue in the case," Laro added. If not, they may not be qualified to testify. "Yes, I have stopped somebody from testifying," he said.

Some judges will be stricter than others, Judge Jacobs noted, and Judge Cohen agreed. "Not only are the judges different, but I am [different] in different circumstances," she said. If the trial is limited to one week, for example, she may strictly apply Rule 143(g); a special session permits more flexibility.

The key takeaway from the discussion: "A lot of times, the experts will come in with impressive credentials," Judge Cohen said, and, as a result, "they think you have to take their word for it. That doesn't work at all," she added. "It is the logic and the support for their opinions that count. . . . You are not going to persuade me because you've written 10,000 articles [and then] you draw a conclusion that is unreasonable."

"There is no question that the most important thing is the analysis and data and the ultimate tying in of the conclusion," Judge Laro agreed. At the same time, the Tax Court judges have noted the advancement in BV education and certifications from the various professional organizations, so "the fact that the particular expert is credentialed and that he or she has studied, has put in a [specified] number of hours, has had some peer review—these are important things," Laro said. "Ultimately we want to rely on the opinion of someone . . . who is learned and studied and considerate, and hopefully empirical. That often comes out of training and credentialing programs."

Red flags of reliability, relevance. As most financial experts are aware, Rule 702 of the Federal Rules of Evidence governs the admissibility of expert evidence in federal courts, including the Tax Court. So does the interpretation and application of the *Daubert* case to the rule, in particular, its four-pronged test for the reliability and relevance of expert testimony: i) the expert's methodology has been tested; ii) it can be replicated; iii) it has been peer-reviewed; and, iv) it is commonly accepted by professionals in the field.

"What are the red flags that you see?" Fishman asked the panel of judges, who responded with this (non-exhaustive) list of five:

1. *Common sense.* "The one thing I [often] want to do is turn to the [expert's] client and say, 'Does this make sense to you?'" Judge Jacobs said. In some cases, he's seen "experts arguing for values—either high or low, depending on the circumstances—which the client would not engage a transaction for," particularly under the applicable fair market value standard of willing seller/willing buyer. "The client really knows better."

2. *Advocacy.* One of the "major problems" that Judge Laro sees is advocacy by the experts, not for their opinions but for the client's position. "The expert is there to aid the court," he said. One troubling sign of potential advocacy: when experts sit next to or behind the attorneys and pass notes during trial. "It makes them look like part of the trial team," Judge Jacobs said. Added Judge Cohen, "We are well aware of who is paying the bill for the experts; we are not naïve." In the best case, the expert's conclusions should be the same no matter which side he or she represents.

Another sign of advocacy: the expert's report bears the "fingerprints" of the attorney. "The only part an attorney should have is . . . stating some basic facts," Judge Jacobs said, or correcting writing errors. Since the expert's report constitutes direct testimony, if the attorney takes

any substantive role in its drafting, it is as if the attorney is testifying.

"I admonish an expert at the beginning of his or her testimony by saying, 'Do you see that door over there? The minute you walked into this federal courtroom . . . you [began] working for this court," Judge Laro said. "You now must provide unbiased testimony."

3. *Unsupported assumptions.* One area in which experts can too easily stray into bias is in selecting the inputs, assumptions, comparables, and other support for their valuation conclusions. "They are trying to justify their compensation," Judge Laro said. For instance, he has seen experts posit a discount for lack of marketability that is so high "it is a little bit absurd." As judges, "we want to see some empirical data; we want to see some analysis; we want to see some detail; we want to see how you arrived at this [conclusion]," he said. There are often millions of dollars at stake when an input or assumption shifts, so the "data has to be current and the analysis in-depth."

'Inherent in these discounts are elements of compensation, which may mean that the experts are overstating the marketability discount.'

4. *Relying on 'filler.'* "I would like to see a complete report; that's obvious," said Judge Jacobs. "However, I'm not sure I want to see an overblown report. After a while, it can lose its effectiveness." Reports that obviously rely on substantial "filler" from prior cases can also lose their relevance. "You want to avoid that trap," Judge Cohen said. "Volume is not as important as directness, conciseness, and addressing the issues," Fishman added, by way of summary.

5. *Lack of transparency.* Judges should be able to take the valuation conclusion in a report and "draw it back to the data to see how one could replicate [it]," Judge Laro said. "You have to connect the conclusion to the data."

In sum, the recent *Boltar* decision was extremely important, the judges agreed, in dealing with the threshold issue of admitting expert reports in Tax Court under the *Daubert* standard. "The problem I personally have is that . . . most of the expert testimony offered in Tax Court on the subject of valuation does not meet *Daubert*," Laro concluded. His opinion might be "remarkable," but at the same time, he foresees more *Daubert* challenges to tax valuations, "and when that comes, I think there will be a serious examination as to whether or not these valuation experts really have a theory, a technique, or a methodology that will meet *Daubert*."

Current views on difficult issues. The recent *Estate of Gallagher* decision was rather "striking," Fishman commented, for "the specificity with which the court [analyzed] each variable," such as the inputs to the discounted cash flow (DCF) analysis, including the cap rate, discount rate, and risk premia, and the sufficiency of comparable companies in the guideline public company method (GPCM). (For the digest of *Gallagher*, its original opinion and supplemental opinion that corrected its own present value calculations, see the Oct. and Dec. 2011 *BVU*.)

None of the three judges on the panel were involved in deciding the *Gallagher* case (which Judge Halpern wrote). But all three agreed that the decision now holds experts to "a fairly specific standard in terms of proving the variables they select," as Fishman suggested. As to these technical areas, the judges had some interesting comments, particularly on the merits of the DCF versus the GPCM, the future of tax-affecting—and how hard it is even for them to make sense of subsequent events:

1. *DCF vs. GPCM.* All the judges have substantial experience with the DCF as presented by

financial experts. "It is obviously a prominent technique to determine value," Judge Laro said. "I believe it is among the most reliable, if not the most reliable, because essentially it is predicting the income benefit [available cash] that will come back from a particular investment." That's "real world stuff," Laro added. Are the variables capable of manipulation? "Of course," but the court can (and will) examine the variables for reasonableness and analytical "fit" to the case—and will modify the assumption, if need be, based on the record.

This last point is important. "One of the things you have to remember is that the judge goes on the [evidence in the] record," said Judge Jacobs. The judge doesn't challenge the variable; the opposing counsel does (or should). "The advocates have the primary responsibility to advocate as to what they think the value ought to be," added Judge Laro. The judge can ultimately decide which of the advocates' competing assumptions are reasonable.

Overall, Laro also believes that the income approach is generally preferable to the market approach, in particular the GPCM, because "you can always find some similarities" among comparable companies, "but you can also find an abundant amount of dissimilarity as well." And so can opposing counsel.

Judge Jacob agreed that the subjectivity with which experts sometimes select their comparables "certainly is a problem." So is an expert's reliance on a single comparable to justify a market value. "That does not work," he said. "You have to find a reasonable number of companies that are similar enough" to the subject company, such that "a hypothetical investor would be interested in buying one of these companies. Then the adjustments are the key," he added: "The devil is in the details." If there are too many adjustments to the comps, then it can render the comparisons meaningless.

Experts should still use the GPCM, the judges agreed, at least as a reasonableness check, because Rev. Ruling 59-60 requires the market approach. "But I wouldn't bet the whole farm on it," Laro said.

2. *Marketability discounts and the OPM*. DLOM is yet another area in which experts obviously differ—and which Judge Laro has maintained is ripe for a *Daubert* challenge. "Over the past several decades, the study of the lack of marketability discount has become more intense and more scrutinized," Laro said. "You now break it down, in a sense, into componentry."

One critical component: the contractual restrictions that affect the subject company stock compared to those in the restricted stock studies, the data that experts still use to derive DLOM. Most of the current cases that litigate DLOM concern stock with seemingly "artificial restrictions," Judge Cohen pointed out. "Should those restrictions be honored?" she asked. "When you get right down to it, some of the most controversial cases [are] on the matter of whether those restrictions [on the subject company stock] are real."

Another issue that affects the use of restricted stock data as well as pre-IPO data and option pricing models (OPMs): "If you look at all of these . . . very intensely and empirically," said Judge Laro, "and you break them down, then you realize it may not be pure lack of marketability discounts" that you are analyzing. "Inherent in these discounts are elements of compensation," he said, which may mean that the experts are overstating the marketability discount.

"I do not think it is enough that somebody uses a restricted stock study based on [studies] from decades ago," Laro added, particularly when the world has changed so drastically—even in just the past several months. "The data has to be current; the analysis has to be in-depth; the data has to be empirical before . . . we buy into

somebody's opinion on lack of marketability," he said. "That may be asking a lot of the valuation industry, but I think it can be done."

3. *Tax-affecting*. None of the judges has yet presided over a case that presented the issue of tax-affecting an S corporation's cash flows. But they all had watched the cases since *Gross v. Commissioner*, and noted the advent (and affirmation) of tax-affecting in the Delaware courts (see, e.g., *Delaware Open MRI Radiology Assoc. v. Kessler*, 2006 Del. Ch. LEXIS 84, available at *BVLaw*). The judges are also aware of the many writings and presentations by members of the BV profession, which may disagree on the appropriate model to use but uniformly support tax-affecting in certain circumstances.

The experts asked each other questions, which resulted in a 'conversation' about their respective analyses, the strengths and weaknesses.

Given this state of affairs: "Is the Tax Court saying, as an institution, that it will [never] tax-affect an S corporation?" Judge Laro asked. Given the valuation community's "intense" belief that its prior decisions were incorrect, "I think it bears further review," he said. All of the Tax Court cases that have considered tax-affecting were issued as T.C. Memos; the holdings are thus limited to their facts. In fact, the judges believe that, should the right case come along, it might merit a full court review and issuance as a T.C. Opinion (as outlined above). Remember what happened to the discount for embedded capital gains tax, Judge Cohen said. After a long evolution of the analysis and support, the cases sustained the discount.

"If I heard correctly," Fishman observed, "you've issued a challenge to us." When valuation experts next confront the issue of tax-affecting, "we should have our homework done and our logic . . . backed up," so that if the case should get to the Tax Court, the issue will be ripe for an authoritative ruling. "The door is open," Judge Laro agreed.

4. *Subsequent events.* An estate tax valuation is based on the "moment of the decedent's death," Judge Jacobs said (although some use the date of death). Anything that impacts valuation subsequent to the date of death generally "has no bearing for me," although he admitted this was an "oversimplification."

Indeed, federal courts have recognized four or five exceptions to the general rule, Judge Laro explained. Some will admit any evidence that is "relevant" under the Federal Rules of Evidence; others will admit only those events that were "known or knowable" as of the valuation date. In the *Estate of Jung v. Commissioner*, 101 T.C. 412 (1993), the Tax Court permitted a subsequent event, adjusted for intervening economic events such as unemployment rates, interest rates, etc.

Thus, it's critical to understand the facts of your case and know the applicable legal rule, usually from the circuit in which the case is tried. Even then, the opinions from the various circuits say that "it is hard to make sense of the opinions," Judge Jacobs conceded, so that the ultimate answer to the question of subsequent events may very well be, "it depends."

5. *Draft reports.* Unlike federal courts in general, the Tax Court permits only limited discovery. For instance, the court is likely to permit expert depositions only in very large cases. At the same time, the court has yet to modify its own rules following the recent amendments to Rule 26 of the Federal Rule of Civil Procedure, which now preclude experts' draft reports from discovery (with some exceptions for the facts or data that the expert received from the attorney). Thus, draft reports are still discoverable in Tax Court,

and, once made, experts should keep their drafts or be vulnerable to charges of spoliation from opposing parties.

Future of the court: concurrent expert testimony? Depending on the case, the judges may help to encourage settlement discussions. In some, Judge Jacobs will call in the parties after they have completed the case and say, "I have heard everything; I am going to decide one way or another, and I don't split the baby." However—the parties may not like the court's decision, and they *can* split the differences between them. "Therefore, why don't you go back and rethink settlement again," Judge Jacobs will tell the parties, before summing his comments on the record.

"I do that frequently," Judge Cohen said, only she puts the entire discussion on the record.

Judge Laro recently experimented with "concurrent" expert testimony. After receiving the parties' consent, both experts appeared and were sworn in; both counsel also attended, in case they had any objections. The experts asked each other questions, which resulted in a "conversation" about their respective analyses, the strengths and weaknesses. The outcome was "efficient and economical," Laro said. "You could probably achieve the same on cross-examination, but . . . the atmosphere was less acrimonious."

One thing the judges all agree on: Any time before a trial involving expert testimony, the parties' counsel can (and should) place a conference call to the presiding judge, to discuss how they want to proceed in terms of qualifying the experts and presenting their cases. For instance, if the parties don't believe they will have sufficient time to present their cases in the trial session, they can ask for a subsequent special session, so the case is not rushed. "We judges are pretty flexible," Judge Cohen said, particularly when it comes to "what the parties will agree to and how it can resolve [any] problems in dealing with expert testimony."

6 How Regression Analysis Makes the Market Approach More Valuable

April 2012
By C. Fred Hall III, MBA, CBA, AVA

In the beginning of my business valuation career, the various market approach methods frustrated me. I found that the values calculated by the gross revenue multipliers were either considerably higher than the values calculated by the cash flow multipliers, or the gross revenue multiplier values were considerably lower. I had to reconcile two values that were often at opposite ends of the spectrum—and each was clearly wrong.

During the past decade, I found that using three regression analyses significantly improved the market approach. Regression analysis helps identify outliers within an initial sample of comparables, which, in turn, produces a smaller sample that has been "sanitized" and is more accurate. Regression analysis calculates a formula from which a line can be graphed that best represents that specific market. Subsequently, when we plot our subject's actual variables on the chart, the regression market line enables us to determine the probable value of the subject company.

A good market approach should employ three different regression calculations. The first calculation, a multiple variable regression analysis, is a statistical tool that compares simultaneously four key variables of each comparable (gross revenues, cash flow, inventory, and fixtures) with its respective selling price. The regression produces a formula in which we can input our subject company's four actual variables and calculate its probable selling price. For demonstration purposes, a simplified regression analysis is graphed in Exhibit 1. We plotted the values for the selling prices and the gross revenues of 17 comparables

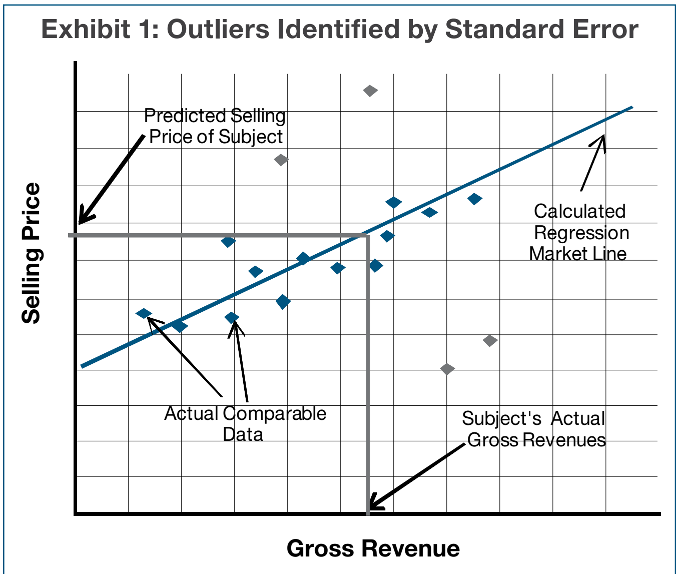
on the chart and calculated a regression line. The subject company's gross revenues of $700,000 is located on the horizontal X-axis. We can identify the probable selling price of $300,000 from the vertical Y-axis on the left side of the chart (note the gray lines) by moving vertically from that point to the regression market line.

Exhibit 1 is a single variable regression analysis that regressed revenues against the selling price. A four variable multiple regression is four of the above charts layered one on top of the other with each layer representing one of the four variables; the calculated market line cuts through all four layers. The multiple regression formula is actually several pages long, but an Excel spreadsheet can perform a multiple regression analysis with a few clicks of a button.

The remaining two regression calculations that an appraiser should use in the market approach compare the cash flow profit margins (SDE%) of the comparables against their respective cash flow multipliers and revenue multipliers. The resulting regression equations predict the most probable cash flow multiplier and the most probable revenue multiplier for the subject.

At this stage, the three different regression equations produced three different probable selling prices for our subject company. Each of the equations produced an R-squared factor that measures how close all the comparables fit to their respective market lines. An R-squared of 0.0 means that the calculated market line had no predictive value whatsoever; an R-squared of 1.0 means that the market line exactly predicted the selling price for each of the comparables. Thus, R-squared gives us a means to compare how good each regression was at predicting the subject's value. In the final reconciliation of values, the appraiser can use the three R-squared factors to determine appropriate weights for each method. (Example, the revenue multiplier weight is 0.80 ÷ 2.25 = 0.36.)

Exhibit 1: Outliers Identified by Standard Error



Method	Value	R-Squared	Weight	Weighted Value
Revenue Multiplier	$500,000	0.80	0.36	$180,000
Cash Flow Multiplier	600,000	0.55	0.24	$144,000
Multiple Regression	550,000	0.90	0.40	$220,000
		2.25	**1.00**	**$544,000**

Regression analysis significantly raises the bar on the market approach. Using R-squared as a weighting measure takes the appraiser out of the guessing game and makes the market approach as technically precise as the income approach.

Editor's note: The author invites the reader to consult his web site at www.affordablebusinessvaluations.com/PricingServices.html for more information on the use of regression analysis methodology and the market approach. Go to the pricing screen and click the "Article 2" button under the Articles Section at the top of the page.

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7 Valuing the 'Inside Basis' Shareholder Tax Liability

July 2012
By Laura Markee, CFA, ASA, with significant contributions from Paul Heidt

Business appraisers who work in estate planning or other situations where a low value conclusion is beneficial to their clients know to be on the lookout for a built-in gain (BIG) tax liability. But another, less well-known shareholder-level tax liability can reduce the tax bill even further.

When a C corporation owns appreciated assets, it is common to reduce value by the amount of a BIG tax liability[1] that reflects the amount of the gain on the sale of the assets multiplied by the corporation's income tax rate.

In general, the business valuation community and the courts[2] are accepting of the application of a BIG tax liability. A company that made an S corporation election less than 10 years before the valuation date[3] may also in some cases be able to recognize the BIG tax liability in arriving at a value conclusion.

In my experience, another liability, a shareholder-level tax on appreciated real estate inside an S corporation, will cause a hypothetical buyer to pay less for the S corporation shares than if it could buy the real estate outright. This tax liability on S corporation inside basis has received little attention in business valuation training and application.

Below is a case example of an actual valuation assignment where the shareholder-level tax was incorporated into the fair market value conclusion and ultimately accepted in full by the Internal Revenue Service (IRS).

Case background. Several years ago, our firm had the opportunity to prepare an appraisal for estate tax reporting purposes. ABC Company (not the real name) was a real estate holding company with $3.2 million in assets, consisting of $400,000 in cash, $200,000 in notes receivable, and $2.6 million in real estate. ABC's largest real estate parcel was a four-acre drive-up theater with a market value of approximately $1.5 million. ABC also had five other properties that included two residences and several small retail establishments. All properties were in a small city on the outskirts of a metropolitan area.

ABC had been in business for many years, having purchased most of the real estate in the 1950s at a very low cost basis. We were able to piece together that the cost basis on all the real estate holdings was $344,000. We considered that there

1 Internal Revenue Code Section 1374 imposes a corporate-level tax on S corporations' income or gain recognition to the extent of unrealized appreciation that existed in the corporation's assets as of the date it switched from C corporation to S corporation status.

At any given date, the potential BIG tax liability is calculated by multiplying the highest corporate tax rate by the total unrealized appreciation in the company's assets as of the date of the conversion to S corporation status that has not previously been recognized. Any asset appreciation occurring after the S corporation election is not subject to a corporate-level tax liability.

2 *Eisenberg v. Commissioner*, 155 F. 3d 50 (1998); *Litchfield v. Commissioner*, TC Memo 2009-21; No. 15882-05 (2009); *Simplot v. Commissioner*, 112 T.C., No. 13 (1999); *Dunn v. Commissioner*, CA-5, 2002-2 USTC Para. 60,446, 301 Fsd 339 (2002); *Jameson v. Commissioner*, 267 F. 3d 366 (2001)

3 Internal Revenue Code Section 1374(d)(7) stipulates a 10-year time horizon following the S corporation election. In February 2009, when the stimulus package was passed, the BIG time horizon was shortened to seven years and applied to sales that occurred in 2009 and 2010. The Small Business Act of 2010 then reduced the time horizon to five years for sales occurring in 2011. Effective Jan. 1, 2012, the BIG horizon moved back to the 10-year period and will be in effect for 2012 and subsequent years.

was accumulated depreciation of $280,000, which resulted in an adjusted basis of $64,000, and real estate appreciation of over $2.5 million.

ABC's founder and minority shareholder passed away in November 2008. ABC had been formed as a C corporation in the 1950s but had elected S corporation status on Jan. 1, 2004. We calculated the BIG tax liability at approximately $780,000, using federal and state corporate tax rates and adding the BIG tax liability to the balance sheet under the asset value approach.

If the S corporation sells any appreciated real estate, it will report a taxable gain that passes through to shareholders.

We then expanded our analysis to capture the shareholder-level tax liability.

'Inside basis' background. In an S corporation, the "inside basis" is equal to the original investment in the company, plus profits and additional capital contributions, less losses and distributions. "Outside basis" includes the same elements, as well as any appreciation in the value of the stock reflected by the additional amount that a shareholder paid to acquire shares of stock above the inside basis. When an investor buys S corporation stock, the starting outside basis is equal to the purchase price of the stock, while the starting inside basis is carried over from the prior shareholder. If the S corporation sells any appreciated real estate, it will report a taxable gain that passes through to shareholders. The shareholders will then pay a tax on that gain. The outside basis of the S corporation stock will not come into play until the stock itself is sold.

Now consider a hypothetical buyer who wants to buy the S corporation's real estate. Would the hypothetical buyer rather buy the S corporation stock that has a low inside basis or buy the real estate directly and acquire a basis equal to the fair market value of the real estate? Common sense says that the buyer would rather buy the real estate directly to have a higher basis and avoid a built-in gain tax at the shareholder level. Thus, the value of S corporation shares should be discounted to reflect the value differential between buying the real estate directly and buying S corporation shares.

A partnership or LLC taxed as a partnership is able to circumvent the shareholder-level BIG tax by making a Section 754 election—a significant reason why partnerships or LLCs are the entity of choice for real estate holdings. This election allows a buyer to receive an inside basis in its ownership interest equal to the price paid to acquire that interest. The Section 754 election, or "step-up" basis, is not available to S corporation shareholders.

Application to decedent's ownership. Based on the amount of appreciation in the real estate and considering state capital gain tax rates at the valuation date, we determined that the shareholder-level tax for ABC was equal to $515,000. We combined this with the BIG tax liability of $780,000 to reduce the net asset value of ABC by approximately $1.2 million.

IRS acceptance. We completed the appraisal in December 2009, and the IRS reviewed the appraisal in early 2011. The shareholder-level tax and the BIG tax liabilities were accepted without question.

Conclusion. Given our experience with IRS acceptance on this issue, we recommend that appraisers become familiar with the facts and circumstances that might allow the application of the shareholder-level tax liability for S corporations that hold appreciated assets.

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8 Analyzing the History of *Bernier* After the Most Recent Massachusetts Appeals Court Decision, *Bernier II*

November 2012
By Marc Bello, CPA/ABV, CVA, CFFA, MST

In January 2012, the Massachusetts Appeals Court was the third court[1] to hear arguments in the matter of *Bernier v. Bernier*. The latest hearing on appeal involved the issue of tax affecting the income from two S corporations owned 50% each by the husband and wife. This article focuses on the interpretations and opinions set forth by business valuation experts, attorneys, and the courts over the span of 10 years specific to tax affecting. The cases referred to are available on *BVLaw*.

The tax affecting valuation conundrum stems from income taxes being imposed directly on C corporations, whereas income taxes on S corps are assessed indirectly, through their shareholders. Further complicating this issue is that different tax rates are imposed on C corps and individuals. When applying an income approach for the valuation of privately owned S corps, the cost of capital is largely based on historical returns of publicly traded C corps where market data and rates of investor returns are available.

The valuation challenge, then, is to arrive at the apples-to-oranges adjustment to an S corp's income that makes it comparable to the after-tax returns of C corps.

1 The case was first heard in the Probate Court in 2002 and then, after remand, in 2009. The appellate court opinions were rendered by the Massachusetts Supreme Judicial Court in 2007 and the Massachusetts Appeals Court in 2012.

Throughout the history of *Bernier*, the foundational concept set forth from the courts has been consistent with regard to the following:

- The income from an S corp is passed through to its shareholders; the shareholders then face the burden of paying the income taxes on behalf of the corporation; and
- An S corp can be distinguished from a C corp based on the avoidance of a dividend (double) tax.

Conceptually, applying an imputed tax for a pass-through entity should result in a cash flow that can be used in the calculation of an equitable value for the company. As far back as the initial decision in 2003, the Probate Court, when faced with such disparity in opinions from the experts, incorporated insightful reasoning and displayed an understanding of valuation theory that, in part, was subsequently overlooked. In its initial decision, the Probate Court recognized "that a deduction for taxes that will be owed must be made to either the earnings or cash flow before an appropriate valuation can be made"[2] and, in part, "rejected the wife's expert valuation recognizing that it was improper to combine pre-tax and post-tax data in establishing a capitalization rate."[3] Both of these concepts are taught in fundamental business valuation courses.

Throughout the history of testimony in *Bernier v. Bernier*, there have been differences of opinion from all the business appraisers relating to the tax affecting of an S corp. The wife retained two different business valuation experts during these proceedings: one during the initial hearing and one after the Supreme Judicial Court ordered the case to remand. Both business valuation experts on behalf of the wife imputed a tax rate

2 *Bernier v. Bernier*, 449 Mass. 774.

3 Ibid.

of zero. The husband also retained two experts. The husband's first business valuation expert imputed a 35% tax rate. On remand, the other expert (a CPA and tax specialist) imputed a tax rate of 46%.

With such disparity in valuation conclusions at each trial, the court was left to resolve the tax affecting of a pass-through entity for divorce. Exhibit 1 is an overview covering 10 years of the tax-affecting controversy surrounding this matter prior to the most recent appellate decision.

Most recently, the Massachusetts Appeals Court weighed in on the ongoing question on how and what is an appropriate imputed income tax rate to apply to the valuation of a pass-through entity for purposes of equitable division of a marital asset.

In *Bernier II*, the court said: "The proceedings on remand were marked by some uncertainty and disagreement between the parties as to what the Supreme Judicial Court intended when it directed that the *Kessler* metric or the *Kessler* approach be applied."[4]

- If the application of the tax-affecting metric in *Kessler* should be interpreted as a binding formula—the position taken by the wife's expert on remand—the result is zero tax affecting. This is based on a change in the tax laws consistent with the valuation date, where the dividend tax rate is equivalent to the ordinary income tax rate. When

4 *Judith E. Bernier vs. Stephen A. Bernier*, No. 11-P-394, 2012 Mass. App.

Exhibit 1. 10-Year Overview of Tax-Affecting Controversy

Date	Wife's Expert	Husband's Expert	Court Interpretation
August 18, 2003 Probate Court Decision 3rd Supplemental Judgment	Imputed Tax Rate 0%	Imputed Tax Rate 35%	• Accepted tax affecting imputed by husband of 35%. • The case used to assist the Probate Court at the time of trial was *Gross v. Commissioner*.* • The court recognized a deduction for taxes must be made to the earnings or cash before an appropriate valuation can be made. • Found wife's expert improperly combined pretax and post-tax data in establishing a capitalization rate.
September 14, 2007 Supreme Judicial Court Decision			• Tax affecting at average corporate tax rate of 35% is not appropriate because applying C corp rate of taxation to an S corp severely undervalues the fair market value of the S corp by ignoring the tax benefits of the S corp structure. • Failure entirely to tax affect an S corp artificially will inflate the value of the S corp by overstating the rate of return that the retaining shareholder could hope to achieve. • Guidance on tax affecting: *Delaware Open MRI Radiology Assocs. v. Kessler***
September 1, 2009 Probate Court Decision 4th Supplemental Judgment	Imputed Tax Rate 0%	Imputed Tax rate 46%	• Found both parties "took unreasonable positions in regards to their interpretation of the [Supreme Judicial Court's] ruling" • Did not believe it was the Supreme Judicial Court's intention to "literally plug in the formula utilized in *Kessler*" • Rejected the opinions of both experts • Imputed a tax rate of 29.4%

* 2001 U.S App. LEXIS 24803 (6th Cir., Nov. 19, 2001).
** 898 A.2d 290, 328-330 (Del. Ct. Ch., 2006).

these two rates are the same, the imputed tax rate is zero.

- If the interpretation of *Kessler* is based on a premise that the imputed tax rate should mimic an applicable tax rate attributed to the individual owner—the position taken by the husband's expert—the result is an imputed tax rate of 46%. The husband argued that following the *Kessler* metric based on pure mathematics would result in an inequitable value.

- If the imputed tax rate calculated by the metric in the *Kessler* case should be applied to the earning stream of a pass-through entity, the result would be an imputed tax rate of 29.4%, which was the Probate Court's conclusion on remand.

Although the Appeals Court acknowledges that the Massachusetts Supreme Judicial Court adopted generally the metric employed in *Kessler*, the appellate decision seems to lead the reader to believe that "adopted generally" means following the metric as a mathematical formula.

The Appellate decision appears to be swayed by the mathematical analysis applied in the Kessler matter.

The Appellate decision appears to be swayed by the mathematical analysis applied in the *Kessler* matter. "While resolution of the issue is not a foregone conclusion, in interpreting *Bernier I*, we think the wife presents the more cogent position. Consequently, we reject the approaches taken by the judge on remand and by the husband, both on remand and on the appeal."[5] With the appellate decision in, Exhibit 2 provides a summary of values determined by the various experts and the court.

After 10 years of deliberations, imputing income taxes to determine an equitable value of an S corp for divorce in Massachusetts remains unresolved. Although conceptual guidance, including the facts that income taxes need to be paid from S corp profits and S corps do not pay double taxation on dividends, arises throughout the *Bernier* hearings, the application of these concepts appears to get lost in translation.

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5 Ibid.

Exhibit 2. Summary of Values by Various Experts and the Court

Date	Wife's Expert	Husband's Expert	Court Interpretation
Probate Court Decision August 18, 2003	Imputed Tax Rate: 0% Value: $16,400,000	Imputed Tax Rate: 35% Value: $9,700,0003	Accepted 35% Imputed Tax Rate Value: $9,700,0004
Difference in value due to tax affecting, $6,700,000			
Probate Court Decision 4th Supplemental Judgment September 1, 2009	Imputed Tax Rate: 0% Value: $14,000,000	Imputed Tax Rate: 46% Value: $9,300,000	Accepted 29.4% Imputed Tax Rate Value: $11,400,000
Difference in value due to tax affecting @ 29.4%, $2,600,000 **Difference in value between 46% and 29.4%, $2,100,000**			

9 Are Limited Liability Companies Worth More Than S Corporations?

December 2012
By Eric J. Barr, CPA/ABV/CFF, CVA, CFE

S corporations, limited liability companies, and partnerships do not pay income tax at the entity level. Taxable income from these entities "passes through" to their owners regardless of whether the earnings are actually distributed. Such pass-through entities (PTEs), therefore, are typically subject to only one level of taxation: at the owner level and not at the business-entity level. Owners of PTEs enjoy the benefit of reduced overall personal and corporate income taxes, avoid the potential for C corporation taxes associated with excess compensation and accumulated earnings, and avoid a second level of income taxes if the assets of a business are ultimately sold.

Approximately 80% of all businesses that file U.S. federal income tax returns are PTEs. However, not all PTEs are alike. An entity's status as an S corporation, LLC, or partnership may impact an owner's rights, tax consequences, after-tax cash flows, and ultimately impact the value of a business equity ownership interest. This article discusses the important factors that impact the value of an equity ownership interest in different PTEs.

S Corporation Limitations/LLC Benefits. S corporations have the following limitations that impact value: (1) limitations associated with ownership; (2) the inability of an owner to deduct, for income tax reporting purposes, the excess of cost over inside tax basis of the S corporation stock acquired; and (3) S corporations can only have one class of capital stock, which limits flexibility with respect to special allocations of income, distributions, equity, etc. A discussion of each of these limitations follows.

Ownership Limitations

There are statutory limitations and restrictions on S corporations regarding the number of shareholders, entity form of the shareholder, and citizenship of the shareholder. Moreover, shareholders can terminate the S corporation election unless restricted from doing so by a company's articles of incorporation, by-laws or other agreements, or by operation of law. These limitations do not exist for LLCs.

For example, the purchase of S corporation stock by a C corporation automatically terminates the S corporation election. Accordingly, C corporations are unable to purchase an ownership interest in an S corporation and retain the PTE benefits noted above. Under the "investment value" or "fair market value" standard of value, depending on the actual/hypothetical buyer, such statutory limitations and restrictions on S corporation ownership can have a material negative impact on the ultimate valuation conclusion. When valuing an ownership interest on the "value to the holder" standard of value, the hypothetical buyer's inability to benefit from the PTE status of an S corporation would not impact value.

LLCs and partnerships are: (1) not restricted from having C corporation owners; and (2) have no restrictions as to classes of ownership and the number of owners. LLCs and partnerships are also not subject to a termination of the entity's status as a PTE by any one of its members. Purchasers of LLCs and partnerships, with few exceptions, can enjoy the same PTE attributes of the subject business that the seller enjoys.

Tax Benefit of Goodwill on Acquisition

When a PTE or C corporation purchases the equity interests of another entity, the purchase price (buyer's outside tax basis) may exceed the owner/member/partner's equity of the acquired entity (company's inside tax basis). There is a materially different tax result if the subject

interest is an equity interest in an LLC or partnership as compared to an S corporation or a C corporation. When the subject interest is an equity ownership interest in an LLC or partnership, the acquirer could make an election under IRC Section 754. This election would enable the acquirer to record an adjustment to the internal tax basis of the assets acquired based upon the purchase price. The purchaser would then be able to allocate the purchase price to each of the assets and liabilities acquired, including goodwill. This process is similar to the accounting for a purchase of assets under generally accepted accounting principles.

When the interest being sold is the capital stock of an S corporation or a C corporation, no such election is available without adverse tax consequences. Accordingly, the taxable basis of the assets of the acquired company (inside basis) remains unchanged, and the buyer does not receive any immediate tax benefit from the goodwill acquired.[1, 2]

How material is the income tax benefit of the goodwill deduction when purchasing an ownership interest in an LLC or partnership? Exhibit 1 presents a calculation of the present value (assumed discount rate of 20%) of the income tax benefit (assumed combined federal and state effective tax rate of 40%) of goodwill ($150,000)

1 The buyer of an S corporation or a C corporation will have an outside basis that is greater than the inside basis of the company. Ultimately such excess basis will provide a tax benefit in the form of a lower capital gain (or an increased capital loss) on disposal of the business.

2 Buyers often buy assets of a selling S corporation (instead of equity) to recognize, among other benefits, a tax deduction associated with the amortization of goodwill.

Exhibit 1. Calculation of Tax Benefit of Deducting Goodwill Amortization

Year	Annual Tax Deduction	Effective Tax Rate	Annual Benefit of Tax Deduction	20% Discount Rate Factor	*Present Value Benefit of Goodwill Amortization Tax Deduction*	
					Annual	Cumulative
1	$ 10,000	40%	$ 4,000	0.9129	$3,651	$ 3,651
2	10,000	40%	4,000	0.7607	3,043	6,694
3	10,000	40%	4,000	0.6339	2,536	9,230
4	10,000	40%	4,000	0.5283	2,113	11,343
5	10,000	40%	4,000	0.4402	1,761	13,104
6	10,000	40%	4,000	0.3669	1,467	14,572
7	10,000	40%	4,000	0.3057	1,223	15,795
8	10,000	40%	4,000	0.2548	1,019	16,814
9	10,000	40%	4,000	0.2123	849	17,663
10	10,000	40%	4,000	0.1769	708	18,370
11	10,000	40%	4,000	0.1474	590	18,960
12	10,000	40%	4,000	0.1229	491	19,452
13	10,000	40%	4,000	0.1024	410	19,861
14	10,000	40%	4,000	0.0853	341	20,202
15	10,000	40%	4,000	0.0711	284	20,487
	$ 150,000		$ 60,000		$ 20,487	
	100.0%		*40.0%*		*13.7%*	

Exhibit 2. Tax Benefit of Deducting Goodwill Amortization Assuming Different Combined Effective Income Tax Rates and Discount Rates

Combined Effective Tax Rates	*Discount Rates*					
	10%	15%	20%	25%	30%	35%
20%	10.6%	8.4%	6.8%	5.8%	5.0%	4.4%
25%	13.3%	10.5%	8.5%	7.2%	6.2%	5.5%
30%	16.0%	12.5%	10.2%	8.6%	7.5%	6.6%
35%	18.6%	14.6%	12.0%	10.1%	8.7%	7.7%
40%	21.3%	16.7%	13.7%	11.5%	9.9%	8.8%
45%	23.9%	18.8%	15.4%	12.9%	11.2%	9.8%
50%	26.6%	20.9%	17.1%	14.4%	12.4%	10.9%
55%	29.3%	23.0%	18.8%	15.8%	13.7%	12.0%
60%	31.9%	25.1%	20.5%	17.3%	14.9%	13.1%

when the acquiring member/partner has made an election under IRC Section 754.

Exhibit 1 indicates that over 15 years, an investor recoups 13.7% of his or her investment in goodwill because of tax benefits (using a 40% effective combined federal and state income tax rate and a discount rate of 20%). Exhibit 2 indicates the investor's recoupment percentage assuming different (1) effective combined federal and state income tax rates; and (2) discount rates. As expected, the recoupment percentage increases when (1) the effective combined federal and state income tax rate increases; or (2) the discount rate decreases.

The formula to calculate the present value of the tax benefit associated with the goodwill amortization deduction is as follows:

$$\sum_{i=1}^{15} \frac{GW \times Tr \times 1/15}{(1 + K)^i}$$

Where:

GW = Goodwill amount
Tr = Combined effective federal and state income tax rate
K = Discount rate

Deriving a tax deduction benefit from amortizing goodwill decreases the after-tax purchase cost of an ownership interest in an LLC or partnership. Therefore, under the investment value or fair market value standard of value, the after-tax cost of acquiring an LLC or a partnership ownership interest is less than the after-tax purchase cost of the same ownership interest in an identical S corporation (assuming the same gross purchase cost). This would, in theory, increase the amount that an actual or hypothetical buyer of an ownership interest would be willing to pay for the subject LLC or partnership ownership interest relative to an ownership interest in an S corporation.

Special Allocations

C corporations can have different classes of capital stock (i.e., preferred stock, common stock) that provide preferences with respect to dividend distributions, receipt of proceeds on sale or liquidation, and other rights. LLCs and partnerships can also have special classes of ownership interests that provide similar types of preferences as C corporations. However, S corporations can only have one class of capital stock and cannot permit different shareholders to have special allocations of rights (other than voting). Failure to comply with federal regulations

restricting special allocations of S corporation ownership interests may terminate the S corporation election.

The ability to offer special allocations of ownership interests is often important to the owners of an LLC or partnership. For example, professional service companies (i.e., accounting firms) often have special allocations of annual revenues, expenses, and profits; proceeds on the sale of the business; voting rights; capital investments; etc. Another example is when a family limited partnership has ownership benefits and voting rights that are often subject to special allocations. The ability to achieve an owners' special allocation goals, whether for expanding the ownership of a business, estate/gift planning, operational purposes, etc., are easier to achieve with LLCs and partnerships than with S corporations.

LLC Limitations/S Corporation Benefits. Given the significant benefits noted above, why would any owner choose to have its business operate in the form of an S corporation and not an LLC or partnership? The answer is because partners in partnerships (other than limited partners) have unlimited liability with respect to the obligations of the business entity; LLC members and S corporation shareholders have limited liability. Some

Exhibit 3. Self-Employment Taxes, 1980-2012

Year	FICA/ Social Security Tax (%)	Medicare Tax (%)	Total (%)	Maximum Earnings Subject to Self-Employment Tax	Total Tax	Year	FICA/ Social Security Tax (%)	Medicare Tax (%)	Total (%)	Maximum Earnings Subject to Self-Employment Tax	Total Tax
1980	7.05	1.05	8.1	$25,900	$2,097.90	1997	12.4	2.9	15.3	$65,400	$10,006.20
1981	8	1.3	9.3	$29,700	$2,762.10	1998	12.4	2.9	15.3	$68,400	$10,465.20
1982	8.05	1.3	9.35	$32,400	$3,029.40	1999	12.4	2.9	15.3	$72,600	$11,107.80
1983	8.05	1.3	9.35	$35,700	$3,337.95	2000	12.4	2.9	15.3	$76,200	$11,658.60
1984	8.7	2.6	11.3	$37,800	$4,271.40	2001	12.4	2.9	15.3	$80,400	$12,301.20
1985	9.1	2.7	11.8	$39,600	$4,672.80	2002	12.4	2.9	15.3	$84,900	$12,989.70
1986	9.4	2.9	12.3	$42,000	$5,166.00	2003	12.4	2.9	15.3	$87,000	$13,311.00
1987	9.4	2.9	12.3	$43,800	$5,387.40	2004	12.4	2.9	15.3	$87,900	$13,448.70
1988	10.12	2.9	13.02	$45,000	$5,859.00	2005	12.4	2.9	15.3	$90,000	$13,770.00
1989	10.12	2.9	13.02	$48,000	$6,249.60	2006	12.4	2.9	15.3	$94,200	$14,412.60
1990	12.4	2.9	15.3	$51,300	$7,848.90	2007	12.4	2.9	15.3	$97,500	$14,917.50
1991	12.4	2.9	15.3	$53,400	$8,170.20	2008	12.4	2.9	15.3	$102,000	$15,606.00
1992	12.4	2.9	15.3	$55,500	$8,491.50	2009	12.4	2.9	15.3	$106,800	$16,340.40
1993	12.4	2.9	15.3	$57,600	$8,812.80	2010	12.4	2.9	15.3	$106,800	$16,340.40
1994	12.4	2.9	15.3	$60,600	$9,271.80	2011	10.4	2.9	13.3	$106,800	$14,204.40
1995	12.4	2.9	15.3	$61,200	$9,363.60	2012	10.4	2.9	13.3	$110,100	$14,643.30
1996	12.4	2.9	15.3	$62,700	$9,593.10						

Exhibit 4. Comparison of the Cost of S Corp Payroll Taxes and Pass-Through Income Taxes to LLC Self-Employment Taxes and Pass-Through Income Taxes

		S Corp	LLC
Company normalized income before reasonable compensation of owner		$500,000	$ 500,000
	Reasonable compensation (1)	(100,000)	(100,000)
	Employer share of FICA/MC tax	(7,650)	-
Company normalized net income		$392,350	$ 400,000
Reasonable compensation		$100,000	$ 100,000
Company normalized net income		392,350	400,000
Total earned and pass-through earnings		$492,350	$ 500,000
Income and other taxes			
	Individual income taxes (2)	$196,940	$ 200,000
	Employee FICA/Medicare taxes (3)	5,650	-
	Self-employment taxes (4)	-	13,300
	Employer FICA/Medicare taxes	7,650	-
	Tax benefit of self-employment taxes (5)	-	(3,054)
		$210,240	$ 210,246

Notes:
1 Reasonable compensation of $100,000 is assumed to be paid as salary for S corp and as a guaranteed payment for LLC.
2 Combined effective 40% effective federal and state income tax rate is assumed.
3 Employee FICA/MC of 5.65% (2012 rate) is assumed.
4 The 2012 13.3% self-employment tax rate per Exhibit 2 is assumed.
5 A portion of the self-employment tax is assumed to be deductible in deriving adjusted gross income.

believe that individuals that are active members/partners of LLCs/partnerships have an additional level of taxation in the form of self-employment taxes that shareholders of S corporations avoid; however, for the reasons noted below, that is not correct.

Self-Employment Taxes

Self-employment taxes consist of Social Security and Medicare taxes primarily for individuals who work for themselves or are actively involved in the operation of an LLC or partnership. It is similar to the Social Security and Medicare taxes withheld from the pay of most wage earners. Exhibit 3 summarizes the maximum annual self-employment tax amounts for the period from 1980 through 2012, before Medicare surcharges on amounts in excess of maximum earnings subject to self-employment taxes.[3]

Individual self-employment taxes are imposed annually on guaranteed payments and taxable income that passes through to members/partners of LLCs and partnerships. It reduces the after-tax cash flows received by an active holder of an ownership interest in an LLC/partnership.

Self-employment taxes are not imposed on taxable income that passes through to S corporation shareholders.[4] Wages earned by S corporation shareholders are subject to employee and

3 Source: bradfordtaxinstitute.com.

4 Federal tax reform proposals under consideration include the imposition of self-employment taxes on S corporation taxable income.

employer portions of FICA and Medicare taxes and thus, are not subject to self-employment taxes. So does it cost more to be paid as an employee in an S corporation or as a member in an LLC?

Exhibit 4 presents an example of total income, FICA, Medicare, and self-employment taxes an owner of an S corporation and a LLC incurs, assuming: (1) $500,000 of normalized earnings before the owner's reasonable compensation; (2) reasonable compensation of $100,000; (3) 2012 FICA, Medicare, and self-employment tax rates; and (4) a combined effective federal and state individual income tax rate of 40%. For purposes of this analysis, federal jobs tax credits, federal and state unemployment insurance, and other payroll taxes have been ignored. As noted in Exhibit 4, the net tax cost of an LLC is virtually identical to the net tax cost of an S corporation, notwithstanding the fact that an LLC's earnings are subject to self-employment taxes.[5]

Conclusion. All PTEs are not alike. Depending on the facts and circumstances of a particular matter, the standard of value, tax laws anticipated and in place, and other factors, the operating form of an entity may add significant value to an ownership interest. An appraiser should carefully consider the matters noted herein to determine the impact of an entity's form on value.

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5 A different conclusion may result when reasonable officer's compensation exceeds normalized income before reasonable compensation of owner.

Proving Damages in Trademark Cases

October 2012

By Stanley P. Stephenson, Ph.D., and
Gauri Prakash-Canjels, Ph.D.

Proving damages in trademark litigation—typically lost profits or disgorgement of the defendant's profits—generally involves citing the infringer's sales of the infringing product. This article considers some ways to measure trademark damages, including lost profits due to diverted sales and/or price reductions, unjust enrichment, reasonable royalty, and increased costs, especially for corrective advertising.[1]

Trademark law is mainly set up to protect the public; the commercial interest of the trademark holder is only a secondary concern.[2] Therefore, damages may not be explicitly considered. In contrast to other types of intellectual property (IP) litigation, the main objective of trademark infringement litigation may not be to recover damages. Also, trademark litigation, like any IP litigation, is expensive and risky. The American Intellectual Property Law Association (AIPLA) 2007 survey of litigation costs puts the risk at $1 million to $25 million and the median cost of IP litigation, including trademark litigation, at a prohibitively high $2.5 million. Discovery and

1 The discussion of lost profits in this article builds on the discussion in Stanley Stephenson, David A. Macpherson, and Gauri Prakash-Canjels' "Computing Lost Profits in Business Interruption Litigation: A General Model," *Journal of Business Valuation and Economic Loss Analysis*, May 2012.

2 This point is made in Glenn Perdue's "Determining Trademark Infringement Liability and Damages," *Crowe: Expert Perspective*, Volume 3, 2005, www .crowechizek.com; Ethan Horwitz's "Cost of Action vs. Damages in Trademark Infringement Actions in the United States," Open Forum Papers Monte Carlo, Nov. 3-6, 1999; and explained in *Getty Petroleum Corp. v. Bartco Petroleum Corp. J Ane JJ*, 858 F.2d 103, Sept. 1988.

attorney time are key cost drivers. To measure trademark damages, one needs to make sure detailed financial information is available on the parties involved and hire damages experts to conduct complex and credible damages assessments.

Requirements for monetary damages. Some courts require evidence of consumer confusion between the plaintiff's mark and the defendant's mark for recovery from infringement, including a monetary reward. Checklists are also often used to establish the likelihood of confusion, but these lists are not consistent among federal circuits. To be awarded damages, some courts may require more evidence than potential confusion, often including evidence of *bad faith or willfulness*. Bad faith can mean different things, including deliberate fraud, intent to cause confusion, counterfeit, and knowingly infringing on the mark holder's rights. If bad faith is established, the standard for measuring the amount of damages may not be as strict. The plaintiff still needs damages proof, but the basis is "reasonable inference."[3] This means a plaintiff need not precisely measure damages, especially if the defendant fails to provide financial data, a tactic that does not preclude recovery. Also, courts may be more forgiving regarding the amount of damages if the plaintiff and defendant compete directly in the same market.

Measuring actual damages in trademark cases. A lost profit of the plaintiff is a standard way to measure monetary recovery; however, calculating lost profits is not without challenges. Presumably, it should be simple to measure the lost sales the plaintiff would have made but for the infringement and then subtract incremental costs on those sales to determine lost incremental profits. Here are a few of those challenges:

3 George G Strong, "Damages Issues of Copyright, Trademark, Trade Secret, and False Advertising Cases." In *Litigation Services Handbook*, edited by Roman L. Weil, et al. John Wiley & Sons, 1995, Chapter 33.

a. *Length of damages period.* Exhibit 1 shows a damages period in which expected profits (EP) and actual profits (AP) are well-defined. In practice, however, start and stop dates to the damages period may not be as clear.

b. *Other factors.* The presumption in Exhibit 1 is that the decline of the actual profits is solely due to the actions of the defendant. However, the defendant will likely point to factors other than infringement, such as competition, product quality, overall economic conditions, and industry changes that could have accounted for at least a share of the decline in actual profits.

c. *Lost profits due to fewer sales.* Profits are defined and measured as revenue (sales) less the costs and expenses incurred in generating those sales. This is a very general expression, and the damages expert needs to carefully consider the facts of the case to know which factors account for lost profits. To an economist, revenue (R) can be expressed as a product of price (P) and quantity (Q) sold. Costs (C) can be expressed as fixed costs (FC) and variable costs (VC).[4] Therefore, it is important to keep in mind that profits can vary as a result of the variation in price, quantity sold, variable costs, and/or perhaps changes in extraordinary costs or other fixed costs.

(1) Profits (π) = $P*Q - VC - FC$

However, often damages experts who assess lost profits damages tend to ignore price considerations, and focus only on lost

4 Variable costs vary directly with quantity, whereas practitioners often assume fixed costs are unaffected by small changes in quantity sold. In addition, some situations may involve the incurrence of extraordinary expenses (E), which are considered part of fixed costs, FC, because these expenses do not vary with quantity.

Exhibit 1. Damages Period When EP and AP Are Well-Defined

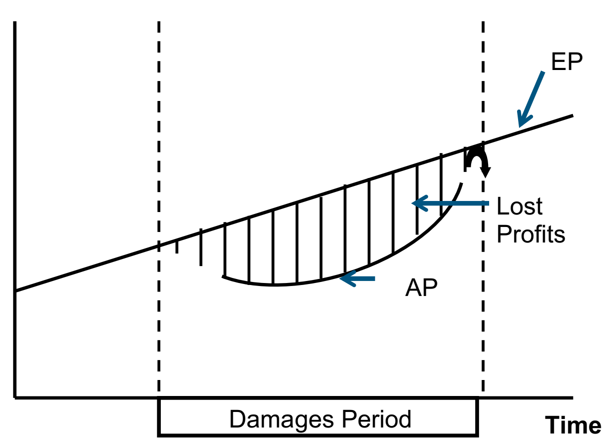


Exhibit 2

Lost profits as general model can be shown as follows.

Revenue but-for an "event" = R_B
And $R_B = P_B * Q_B$, where P_B is the price and Q_B is the quantity sold but-for the event.
Profits but-for the event = Π_B
$\Pi_B = R_B - F_B - V_B$, where F_B is the fixed cost and V_B is the variable cost (in the but-for world).

Actual revenue after the event = R_A
$R_A = P_A * Q_A$, where P_A is the actual price and Q_A is the actual quantity.
Actual profits after the event = Π_A
$\Pi_A = R_A - F_A - V_A$, where F_A is the actual fixed cost and V_A is the actual variable cost. Lost profits is thus expressed as:

$\Pi_B - \Pi_A = (R_B - R_A) - (F_B - F_A) - (V_B - V_A)$

sales quantity (Q) and assume the "but-for" price equals the actual price.[5]

Key factors may not stay the same, especially if the trademark infringement continues for some time. What if there are changes in fixed costs, prices, or marginal costs of production or the trademark infringement impacts factors such as economies of scale? It is also possible that the firm incurs extraordinary expenses (E), perhaps due to extra advertising or other extra spending that does not vary directly with production (V) but adds to overhead.

d. *General case.* To provide a formal description of the generalized model, we next provide an equation that describes profits before and after an infringement. The derivation of the more generalized equation for determining the lost profits is provided in Exhibit 2.

In the most general case, damages suffered because of the infringement are estimated as $\Pi_B - \Pi_A$. Substituting the expressions for but-for and actual profits from the equations given in the Appendix, we have:

(2) $\Pi_B - \Pi_A = (R_B - R_A) - (F_B - F_A) - (V_B - V_A)$

The first term, "$(R_B - R_A)$," shows damages suffered because of changes in revenue that can be due to price and/or quantity changes (such as price erosion or lost sales). The second term, "$(F_B - F_A)$," refers to the change in fixed costs because of the event. These changes in fixed costs may include advertising and other expenses incurred due to the infringement. That is, $F_A = F_B + E$, where E is extraordinary expenses. The last term, "$(V_B - V_A)$," refers to change in variable costs due to the sales decline suffered due to the event.

5 See Foster and Trout, *op cit*. p. 9. Lost profits = lost revenue – avoidable variable costs. "Courts have generally agreed with economists on this proposition, and fixed costs (or overhead expenses in accounting terms) are nearly always ignored in measuring lost profits." While relatively straightforward, a number of underlying assumptions are made when using this expression: if prices are assumed to have not changed, only quantity sold falls, overhead costs do not change, cost structures do not change, and no new costs are incurred because of the disruption or dispute. Damages assessments in trademark cases should not always make these simplifying assumptions, but should consider each factor as a potential source of lost profits.

Three methods to assess damages. Exhibit 1 compares the profits that the injured party expected to make with the profits that it actually made to determine the lost profits due to the trademark infringement. These models introduce the conceptual approach to damages.[6] Damages practitioners will likely measure these losses using one of two methods: the "before/after" approach or the "yardstick" approach. The before/after approach, which economists refer to as a time series approach, considers the change in the profits before and after an event and calculates lost profits as the difference between the two. This approach presumes sufficient data are available for each period to conduct the analysis and that the event causing the interruption is time-bound.[7] The yardstick approach is a cross-section approach in which the analyst examines the profits of similarly situated companies during the damages period. It suggests that a computation of lost profits should be based on a comparison of actual profits of target companies with a measure of expected profits that reflect economic and market experiences of similarly situated companies.

Practitioners and the courts widely accept both the before/after and yardstick methods. However, a simple use of either approach is not recommended. Events other than the one leading to the lawsuit may have contributed to the decline in profits. Failure to consider such factors opens the expert to challenge from the opposing side's expert.

If the damaging event took place during a period of rapidly changing economic conditions for the industry, then steps should be taken to reflect these changes in the lost profits analysis. Similarly, in using a yardstick approach, the analyst should expect to be challenged on the grounds that the target company may not be sufficiently comparable to other business(es), used as a yardstick or benchmark, in the same competitive market.

Standard approaches to estimating damages in trademark infringement cases. A plaintiff who successfully establishes a violation of Section 43(a) of the Lanham Act may obtain injunctive relief and is entitled to recover, subject to the principles of equity: (1) any damages sustained by the plaintiff; (2) the defendant's profits; and (3) the costs of the action. The court may treble any of these damages and, in exceptional cases, may award reasonable attorney fees to the prevailing party. 15 U.S.C. §§ 1116 and 1117(a).

Plaintiff's Lost Profits Due to Fewer Sales. While one can treat each of these and other situations as exceptions to the base lost profits model in Equation 2, we believe a more generalized model of lost profits is needed. Let us assume that in the "before" and "after" scenarios, the price did not change and fixed costs do not change, which may be reasonable assumptions for a shorter time frame. That is, $P_B = P_A = P$ and $F_B = F_A$. Expanding out the expression for but-for revenue, $R_B = P_B{*}Q_B$, and actual revenue, $R_A = P_A{*}Q_A$, in Equation 2, one obtains:

(3) $\Pi_B - \Pi_A = [P{*}(Q_B - Q_A)] + E - [VC{*}(Q_B - Q_A)]$

This expression assumes that changes in variable costs occur only because of a change in quantity. The per-unit variable costs (VC) don't change with a change in quantity, i.e., we are assuming there are no economies of scale.

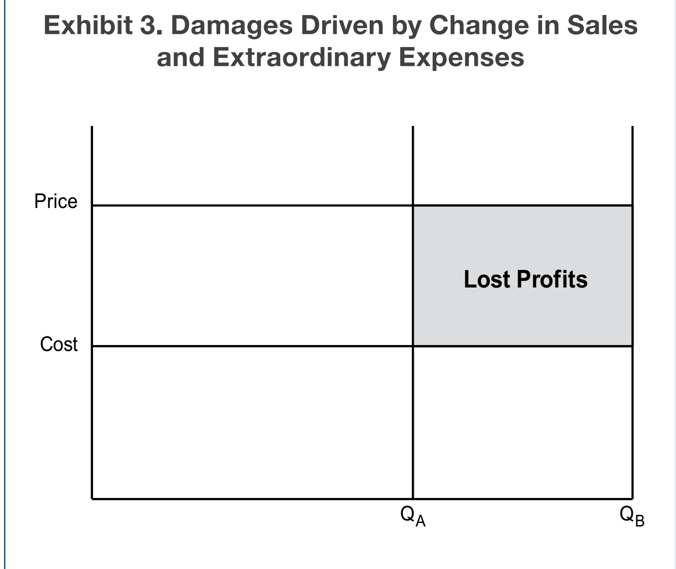
6 Nancy Fannon (2011) lists four methods: before/after, yardstick, sales projection, and market model. The approaches imply data-gathering tactics and provide different perspectives on how the expert analyzes the data.

7 The before/after approach may require a sales projection to determine "but-for" sales during a damages period. Multiple regression or other techniques may be used to make these projections, including the ability to make adjustments for seasonality and trend in these regressions.

In this situation, damages are driven only by the change in sales and extraordinary expenses, E, if there are any such expenses. Such a situation is likely to occur when the injured company operates in a highly competitive market and there are no economies of scale. This case is shown in Exhibit 3 (with no change in fixed expenses).[8]

Disgorgement of Defendant's Profits. Exhibit 3 can show the defendant's added profits from the trademark infringement assuming that the extra sales were due to the trademark infringement. In a situation where the defendant's profits are awarded as damages, they often assume a showing of bad faith. In some cases, disgorgement of the defendant's profits serves as a proxy for the plaintiff's lost profits due to the trademark infringement. Courts in these types of cases may use different approaches to allocate the defendant's expenses to infringing sales. If the remedy to trademark infringement is disgorgement of the defendant's profits, the plaintiff has the burden of showing lost sales, but the defendant needs to show what costs to consider in measuring unjust profits from these sales (not just deduction of incremental expenses of the defendant on ill-gotten sales).[9] Failure to show such costs means the plaintiff may be awarded all revenue on such sales.

Exhibit 3. Damages Driven by Change in Sales and Extraordinary Expenses



Costs of Corrective Advertising to Correct Public Confusion. In certain circumstances, a plaintiff may be able to recover the actual or estimated cost of corrective advertising to remedy the false or misleading advertising.[10]

> Where the plaintiff has already expended funds on a corrective advertising campaign, it is relatively simple for the court to evaluate the cost. For example, in *U-Haul International v. Jartran, Inc.*, the Ninth Circuit awarded the plaintiff 13.6 million dollars, which reflected the amount the plaintiff had spent in corrective advertising, even though it was over twice the cost of the original advertisement by the defendant. 793 F.2d 1034, 1037 (9th Cir. 1986). A more difficult task, however, arises when the award is for future corrective advertising. The seminal case awarding monies for prospective corrective advertising is *Big O Tire Dealers, Inc. v. Goodyear Tire and Rubber Co.*, 408 F.Supp. 1219 (D.Colo. 1976). The District Court, on post-trial motions, upheld a jury verdict of 2.8 million dollars based on the amount of advertising the plaintiff would need to engage in corrective advertising. 561 F.2d 1365 (10th Cir. 1977). The district court had instructed the jury to measure the amount of damages as the difference between the value of the plaintiff's trademark goodwill before and after the defendant's infringement. The purpose was to put the plaintiff back in the position it would have been, but for the infringement. The court

8 This figure is derived from Strong (1995).

9 It is important to research the case law on disgorgement damages in the appropriate circuit because some courts allow for deducting costs beyond incremental costs, such as overhead costs that are directly attributable to the production of the ill-gotten sales of the defendant.

10 Lawrence B. Steinberg, "Remedies Available for False Advertising Under California Business & Professions Code §17500 and Section 43(A) of the Lanham Act," *Buchalter Nemer*, July 2005.

then instructed the jury to consider the amount necessary for the plaintiff to spend on an advertising campaign to eliminate marketplace confusion and to educate consumers. The jury's award was based, in part, on the plaintiff's previous year's advertising expenditures. The Court of Appeals, however, determined that the 2.8 million dollar award was too much and adopted a 25 percent ratio, used by the Federal Trade Commission which is based on 25% of the past year's budget on corrective adverting. 561 F.2d at 1376.

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Other damages issues under Lanham Act. A lost profit is the most common monetary remedy in trademark cases, but is not the only remedy. Here are a few others:

1. Expenditures to restore the *goodwill* of the plaintiff, like loss of *reputation*, may be hard to measure.
2. A *reasonable royalty* for licensing the trademark in question. The idea is that the plaintiff would have received royalty payments from the infringer if the infringer had sought a license to the trademark rather than infringing it.
3. *Statutory damages* are stipulated payments of some fixed monetary payment per counterfeit trademark or unlawful domain name.[11] These rules apply to counterfeiting and require special monetary remedies. Under the 1994 Counterfeiting Act, treble profits and attorney fees may be awarded.
4. *Principles of equity.* According to some federal courts, Section 35 of the Lanham Act does not imply a prevailing plaintiff can obtain monetary rewards in addition to injunctive relief. Monetary relief is denied when an injunction will satisfy the *equities* of the case and there is no finding of bad faith or fraud.[12]
5. *"Compensation, not penalty."* Section 35 of the Lanham Act grants courts considerable discretion to increase damages up to treble damages and increase or decrease awards that the court deems too low or too high, respectively.
6. *Punitive damages* are not authorized under the Lanham Act but may be obtained by the plaintiff if the venue is a state court that has statutes regarding punitive damages in trademark cases. As expected, thresholds for such an award are often willfulness and bad faith.
7. *Dilution of "famous" trademark.* The Federal Trademark Dilution Revision Act of 2006 often provides only injunctive relief. However, if willful misconduct or dilution by the infringer is established, then the United States Trademark Act permits the plaintiff to recover the defendant's profits, damages, and attorneys' fees and allows for the destruction of the infringing goods.

This article has mainly focused on some issues confronting measurement of actual lost profit, such as those arising from lost sales or price erosion. However, other types of damages may also be available under the Lanham Act or comparable state laws, including infringer's profits (disgorgement) and special penalties for certain types of infringements, such as counterfeit or dilution. Even so, if actual damages are demonstrated and the plaintiff prevails, the court may increase or reduce the damages award subject to its discretion and the application of principles of equity. Damages awards in trademark cases cannot be easily described or predicted via some simple accounting or economic formula and, to some extent, are complex within the available statutes and common law.

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11 15 U.S.C.1117(c) and 15 U.S.C. 1117(d).

12 Ethan Horwitz, "Cost of Action vs. Damages in Trademark Infringement Actions in the United States," Open Forum papers, Paper MC/3.6.