

Willamette Management Associates

# Insights

Issue 113

Autumn 2017

*Business Valuation, Forensic Analysis, and Financial Opinion Insights*



THOUGHT LEADERSHIP IN DISPUTE RESOLUTION  
AND FORENSIC ANALYSIS



Willamette Management Associates

\$10.00 U.S.



**Willamette Management Associates**  
*Thought Leadership*

# Insights

*Insights*, the journal of applied microeconomics, is published on a quarterly basis, with periodic special interest issues. *Insights* is distributed to the friends and clients of Willamette Management Associates.

*Insights* is intended to provide a thought leadership forum for issues related to the Willamette Management Associates business valuation, forensic analysis, and financial opinion services.

*Insights* is not intended to provide legal, accounting, or taxation advice. Appropriate professional advisers should be consulted with regard to such matters. Due to the wide range of the topics presented herein, the *Insights* discussions are intended to be general in nature. These discussions are not intended to address the specific facts and circumstances of any particular client situation.

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We welcome reader comments, suggestions, and questions. We welcome reader recommendations with regard to topics for future *Insights* issues. In particular, we welcome unsolicited manuscripts from lawyers, accountants, bankers, and other thought leaders of the valuation and forensic services community. Please address your comments or suggestions to the editor.

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## Forethoughts

This *Insights* issue focuses on dispute resolution and forensic analysis services. Dispute resolution is commonly defined as the process of resolving a conflict, dispute, or claim between parties. The resolution of disputes can take on many forms. According to the American Bar Association, dispute resolution processes can provide alternatives to having (1) a judicial finder of fact (such as a state or federal judge or jury) decide the dispute in a trial or (2) other institutions decide the resolution of the case or contract.

This *Insights* issue provides a discussion related to best practices in the premediation of breach of contract or tort disputes. This discussion suggests that by better preparation, careful planning, and a genuine desire to assist the client, counsel can use mediation to produce successful results. In many cases, mediation and settlement discussions can provide a successful conclusion to the dispute.

Because of the numerous business-related litigation matters filed each year in the State of Delaware, this *Insights* issue provides a significant discussion of litigation matters decided by the Delaware Court

of Chancery. In these Delaware Chancery Court matters, many of which are dissenting shareholder appraisal rights or noncontrolling shareholder oppression claims, the dispute was not resolved until adjudication by the Chancery Court.

In tort or breach of contract litigation, whether the matter is related to shareholder grievances or other matters, the cost of capital and its application is an important matter. Courts are often burdened by the analysis and selection of cost of capital components. These analysis and selection processes are particularly complicated.

Each discussion presented in this *Insights* issue was developed by legal counsel and/or damages analysts with significant experience in conflict resolution in securities litigation—or other litigation matters. Willamette Management Associates regularly provides independent financial adviser, economic damages, forensic analysis, and valuation consulting services for securities-related tort claims or breach of contract litigation. These forensic analysis services often include expert testimony and related litigation support services.

## About the Editor

### Kevin M. Zanni

Kevin M. Zanni, ASA, CVA, CBA, CFE, is a director of Willamette Management Associates, a business valuation, forensic analysis, and financial advisory firm. He resides in our Chicago office.

Kevin's practice includes providing valuation and financial advisory opinion services to publicly traded businesses, closely held businesses, professional sports franchises, professional practitioners, and high net worth individuals. He often works with legal counsel for closely held businesses, publicly traded companies, and multinational corporations.

Kevin provides valuations of businesses, business interests, and securities for transactional, financing, taxation, financial accounting, and dispute resolution purposes. His taxation-related work includes the valuation of intangible assets for income tax, estate and gift tax, and state and local property tax purposes. Kevin's practice also includes the analysis of intangible asset economic damages related to breach of contract claims and tort claims.

Kevin holds a bachelor of science degree in business administration, with a major in finance, and a master of arts degree in international business, both from the University of Florida. Prior to college, Kevin proudly served in the U.S. Army.

Kevin is an accredited senior appraiser (ASA), a certified valuation analyst (CVA), a certified business appraiser (CBA), and a certified fraud examiner (CFE).

He has authored numerous thought leadership journal articles for such professional publications as the National Association of Certified Valuators and Analysts (NACVA) publication *The Value Examiner* and the Commerce Clearing House publication *Business Valuation Alert*.

Kevin has delivered thought leadership presentations to numerous professional associations and conferences including the Institute of Management Accountants and Valparaiso University School of Law. In 2014, Kevin was interviewed twice by the National Public Radio Marketplace radio program regarding the valuation and sale of the Los Angeles Clippers.

Kevin is a past president of the Chicago Chapter of the American Society of Appraisers. He is the current president of the Business Valuation Association of Chicago.





## Thought Leadership Discussion

# Over Prepare, Then Go with the Flow: Legal Counsel Best Practices in Premediation Preparation

Anthony J. Rospert, Esq., and Todd M. Seaman, Esq.

*Prior to mediations involving complex business disputes, the parties and legal counsel typically exchange offers and counteroffers—often focused solely on the dollar amount involved. The parties and legal counsel may also exchange mediation briefs addressing substantive legal issues. However, legal counsel—and consulting experts—often devote little or no time to understanding the client’s interests and goals, evaluating the case strengths and weaknesses, developing a budget, or assessing settlement options. This discussion provides a practical guide to preparing for mediation and summarizes the best practices for conducting a premediation assessment in order to maximize the likelihood of a successful dispute resolution.*

## INTRODUCTION

As Benjamin Franklin famously said, “By failing to prepare, you are preparing to fail.” This statement is true of many things in life, including tort and contract dispute mediations.

A study conducted by the ABA Section of Dispute Resolution Task Force on Improving Mediation Quality found that premediation preparation is critical to a mediation’s success.<sup>1</sup> Yet all too often, counsel and disputing parties show up to a mediation without sufficiently evaluating their case or discussing their goals. Inadequate preparation is a disservice to the client.<sup>2</sup>

Not only can a lack of preparation result in costs spiraling out of control, it can also jeopardize what may be the best opportunity to resolve the dispute. By performing a premediation case assessment with the client, legal counsel can (1) identify the client’s goals for the mediation and (2) formulate a plan to achieve them. Indeed, taking control of the process can improve counsel’s likelihood of determining the mediation’s outcome and engaging in productive settlement negotiations.

This discussion identifies best practices for:

1. conducting a premediation assessment, the goal of which is to invest time and energy prior to the mediation to understand the client’s expectations, business interests, and needs;
2. identifying the client’s goals for the mediation; and
3. developing a strategic plan to meet those objectives.

When executed properly, a premediation assessment enhances the efficiency and transparency of the mediation process. And, it can lead to a cost-effective, business-driven solution not otherwise available in litigation.

## IDENTIFY THE CLIENT’S INTERESTS, NEEDS, AND GOALS

Uncovering and understanding the client’s goals are the first steps in counsel’s premediation assessment.

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**“During the mediation process, the client may need to reexamine his or her needs and interests and recalibrate his or her position to reach a satisfactory outcome.”**

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And, these steps serve as the foundation for the entire process. Developing a thorough understanding of the client’s objectives for the mediation enables counsel to structure a plan to meet those goals and ensure that the client’s interests are taken into account throughout the process.

When identifying and assessing goals, counsel should focus on how the client’s needs and interests may impact settlement

negotiations. This will allow counsel to refine the settlement options and positions so as to align with the client’s objectives.

Clients involved in tort or contract disputes sometimes mask their needs and interests. This is because either (1) they do not know their true concerns or (2) they are driven by emotion, such as the desire to vindicate a position or punish the other side. Thus, counsel’s tasks are to explore and uncover the client’s true needs and interests. Counsel can accomplish this goal by asking open-ended questions about the following:

1. Genesis of the dispute
2. Client’s goals
3. Reasons behind those goals

Once counsel has identified the client’s needs and interests, counsel should prioritize these needs/interests with the client as the litigation team begins considering settlement positions. During the mediation process, the client may need to reexamine his or her needs and interests and recalibrate his or her position to reach a satisfactory outcome. Counsel’s role includes the following:

1. Identifying which goals must be satisfied to reach a resolution
2. Formulating alternative settlement paths that align with those goals

## **THOROUGHLY ASSESS THE EVIDENCE AND THE LAW**

Counsel should prepare for a mediation as he or she would for trial. Before the mediation, counsel should assess the who, what, when, why, and how of the case and determine if there are any information gaps.

A full understanding of the relevant facts and applicable law is necessary for the client to make an informed decision when considering the range of settlement options. A comprehensive grasp of the facts also enables counsel to get ahead of the mediation process by evaluating the relative risks of the case to determine whether a mediated settlement is preferable to continued litigation.

Just like at trial, mastering the facts and the law is important to the outcome of a mediation. However, counsel’s focus in preparing for a mediation should be on analyzing the information likely to have the greatest impact on settlement, as opposed to analyzing the material that a judge or jury would need to understand for trial.

To understand the client’s version of the facts, it is incumbent upon counsel to conduct interviews, review relevant documentation, and gather additional documentary support.

As part of the premediation assessment, counsel should identify the key witnesses in the dispute, consider the dynamics of their relationships, collect critical documents from them, and consider which categories of documents (both favorable and unfavorable) require further analysis and review. To limit the risk of surprises at the mediation, counsel and the client should determine in advance if there are gaps in the facts and, if so, formulate a plan to obtain any missing information.

Finally, counsel should research all relevant legal issues in order to evaluate the strengths and weaknesses of the known facts.

By coming to the mediation with a comprehensive understanding of the facts and the law, counsel can stay in front of the other side and build credibility with the mediator. More importantly, counsel can communicate key evidence and legal arguments to the mediator who, in turn, can educate the other side about the important weaknesses in its case and/or the relative strengths of the client’s position.

## **EVALUATE THE STRENGTHS AND WEAKNESSES OF THE CASE**

After marshalling the key evidence and law, counsel’s next step is to determine the case merits by assessing its strengths and weaknesses. The evaluation should “[b]reak the case down into a series of issues rather than a simple question of value; this will [ ] encourage analysis that is less affected by wishes and emotions.”<sup>3</sup>

It is important that counsel not only outline the strengths of the case, but also focus on its

weaknesses—by considering the opposing parties' perspective. What are they likely to argue? What flaws will they see in the client's theory? What bad facts will they focus on? A premediation assessment that contemplates both the strengths and weaknesses of the case allows the client to develop a realistic bargaining zone for the mediation.

The candid assessment also builds credibility with the mediator. This is because counsel is able to demonstrate to the mediator that both counsel and the client have considered the weaknesses in the case in arriving at the settlement position.

Further, reviewing the case strengths and weaknesses allows the client to conduct an accurate cost-benefit analysis, comparing what may be achieved in settlement with the legal and business consequences of continued litigation to arrive at a realistic settlement range.

In preparing for a mediation, it is important that counsel controls the client's expectations by:

1. recognizing and discarding counsel's advocacy bias and
2. engaging in a realistic assessment of the case from the perspective of a disinterested neutral.

Failing to do so results in "optimistic overconfidence," which is passed on to the client, who becomes emboldened and overestimates the value of its case and is thus less likely to compromise.<sup>4</sup>

Finally, counsel should advise the client that the aim of the mediation is not to win the case, but rather to problem solve. Mediation necessarily involves compromise, which requires collaboration between all participants regardless of the strengths and weaknesses of the case.

## DEVELOP A COMPREHENSIVE BUDGET

A budget is integral to any premediation assessment. And, counsel should devote sufficient time to preparing a comprehensive and detailed budget prior to a mediation. A well-designed litigation budget can clarify the outlook on a case and set client expectations regarding how the case will proceed if a settlement is not reached.

While a budget is an effective tool for informing the client of the financial impact of not settling, it also serves a more important role as the starting point for developing a settlement range. Indeed, a budget enables the client to consider whether:



1. continued litigation is cost prohibitive and/or
2. the client is willing to incur the necessary expenses associated with taking the case to trial.

In creating a budget, counsel should use his or her best judgment to assess the case and the client's goals to generate a realistic picture of the litigation costs if settlement negotiations fail. Understanding the scope of future litigation phases is important to building a budget. This includes first identifying the assumptions underlying the case, such as the duration or complexity of the matter, which serve as the foundation for the budget.

Next, counsel should evaluate how he or she will staff the budgeted tasks with the available resources (lawyers, paralegals, document clerks, etc.). Finally, counsel should estimate the amount of time necessary to perform each task.

Armed with a realistic budget, counsel and the client can then compare the costs of taking the case to trial with the possibility of obtaining a business resolution at the mediation.

## CONSULT WITH EXPERTS

Consulting financial experts are in a unique position to provide premediation assistance to parties and their counsel. When preparing for a mediation, engaging an expert early in the process can yield significant benefits, particularly in cases involving complex financial disputes, complicated damage calculations, valuation issues, or forensic accounting.

A consulting financial expert can help accomplish the following:

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## **“[T]he effective use of a consulting financial expert during the premediation assessment process can enhance the likelihood of resolving a complicated financial case.”**

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1. Isolate and clarify critical financial issues in the case
2. Identify missing information
3. Temper expectations
4. Offer innovative solutions to help achieve a settlement

During the premediation assessment, a consulting financial expert is also able to objectively analyze the parties' positions to project a realistic

outcome by (1) providing the client with an unbiased opinion on the financial aspects of the case and (2) supporting counsel's legal evaluation of the case as counsel heads into the mediation.

In addition, a consulting expert can pinpoint major areas of dispute between the parties prior to the mediation, which can facilitate productive brainstorming to explore viable options for the client to reach a successful resolution. In short, the effective use of a consulting financial expert during the premediation assessment process can enhance the likelihood of resolving a complicated financial case.

### **CONSIDER THE ROADBLOCKS**

Impediments to settlement can thwart a potential resolution if not adequately contemplated before the mediation. Such impediments should be identified and assessed to determine (1) if they are indeed “deal breakers” or (2) if creative settlement paths exist to overcome them.

Such obstacles can include the following:

- Prior failed settlement negotiations
- Insufficient resources to fund a settlement
- The desire to avoid copycat lawsuits
- Your client's need to respond to a frivolous claim
- Reputational and/or stock price concerns
- Difficulties in reaching a global resolution where multiple parties are involved
- Stakeholders who would rather lose the case than settle

Analyzing potential settlement hurdles allows the client to make an informed decision as to whether a resolution is feasible. With ample preparation, however, no impediment should act as an absolute bar to settlement. Indeed, the beauty of mediation is that it is not a win-lose proposition, but rather an opportunity for the parties to craft creative solutions that are not otherwise available in litigation.

Counsel can reframe potential obstacles or propose settlement alternatives that may lead clients to reconsider their positions in such a way that their needs and interests are satisfied notwithstanding the potential impediments.

Of course, moving the client from an entrenched position is no easy task, but sacrificing the opportunity to develop inventive solutions is likely to lead to expensive, time-consuming litigation. In general, evaluating potential barriers as part of the premediation assessment can lead to the development of creative settlement remedies that overcome most, if not all, of the hurdles to a mediated settlement.

### **GENERATE AND WEIGH SETTLEMENT OPTIONS**

The next step in the premediation assessment process is to establish the monetary settlement range that would satisfy the client, along with any non-monetary solutions that could resolve the dispute.

Counsel and the client should first conduct a brainstorming session to identify possible settlement options that will address the client's needs and interests and help achieve the desired end result. Counsel should think outside the box and consider innovative solutions that will fulfill the client's needs, interests, and goals.

Once potential alternatives are refined, counsel should prioritize those options and place a settlement value on each. In doing so, he or she will define the client's settlement range.

Next, counsel should collaborate with the client to evaluate the range of acceptable outcomes and the viability of each potential settlement option. It is important for counsel to have a candid discussion with the client about the likelihood of each option leading to a resolution.

Some basic questions for counsel to ask include the following:

- What are the costs and benefits of this option?
- Are there any nonmonetary costs in pursuing this option?
- Is this the best possible outcome?



- Does this outcome satisfy the client's needs and interests?
- Is the other side likely to find this option acceptable?

Counsel's role is to guide the client as it considers the costs and benefits of each settlement option and to assist in prioritizing the options and weeding out unacceptable or unrealistic options.

When analyzing settlement options, also consider litigation costs and risks, along with the business costs and reputational concerns associated with proceeding to trial. Assigning a probability to each settlement option can help identify those that are most likely to result in a compromise.

Counsel can calculate this probability using the following formula:

$$\begin{aligned} & \text{Plaintiff's likely percentage of success} \\ \times & \text{Likely damages award} \\ + & \text{Defendant's projected attorneys' fees and costs} \\ = & \text{Defendant's loss exposure} \end{aligned}$$

For example, if counsel and the client believe that counsel has a 60 percent chance of defeating the plaintiff's \$1 million claim at trial, with expected legal costs of \$300,000, the potential settlement value is \$700,000.

Although there are differing schools of thought as to how much of this evaluation counsel should share with the mediator, candidly disclosing such information can enable the mediator to more effectively assist the client in developing settlement options and ways to overcome settlement impediments. In any event, counsel should support each proposed settlement option at the mediation with a rationale that is buttressed by documents, calculations, and/or expert opinions.

The worst possible settlement option to present at the mediation is the one that is pulled from thin air, leaving the mediator and the other party dazed and confused. With adequate preparation, however, every settlement option the client presents will have a well-reasoned justification and supporting calculation to share with the mediator and the other side.

## DEVELOP POTENTIAL SETTLEMENT STRUCTURES

Prior to the mediation, counsel and the client should also review possible settlement structures, so counsel is prepared should the parties reach a compromise. By addressing potential settlement terms before the process begins, the parties can ensure that they are in the same bargaining zone

before investing the time and incurring the costs associated with mediation. Accordingly, outlining a settlement structure as part of counsel's premediation assessment allows counsel to focus on the critical issues in the dispute.

Because a mediator is likely to lack deep insight into the client's business relationship with the other side, the client is in the best position to develop a settlement structure that will satisfy his or her business needs going forward. Of course, there is no guarantee that the parties will agree on a settlement payment or final resolution. However, the consideration of potential structures is a starting point for developing a path to settlement.

Some common settlement agreement provisions that warrant counsel's attention during the premediation assessment include the following:

- What claims will be released?
- Which parties will be released?
- How broadly will the releases apply?
- Is a confidentiality provision and/or non-disparagement clause necessary?
- Will the parties pay their own attorneys' fees and costs?
- What is the accepted method of payment for a monetary settlement?
- Are terms needed to address unique circumstances, such as tax issues?

Once counsel develops possible settlement scenarios with the client, the terms should be memorialized in writing. The proposed term sheet should outline paths to settlement that warrant further discussion with the other side. While the term sheet should be streamlined and fairly brief (e.g., several bullet points), it should include provisions for each settlement scenario that the client believes are vital to settlement.

The proposed term sheet document should then be shared with the other side and perhaps the mediator. Considering these issues prior to the mediation can avoid a worst-case scenario in which the parties agree on a settlement, but a satellite issue—such as confidentiality—derails an otherwise amicable resolution.

## SCHEDULE A PREMEDIATION CONFERENCE WITH THE MEDIATOR

Arranging a meeting between the mediator and the client prior to the mediation session may accomplish the following:

1. Previewing the client's settlement positions
2. Avoiding potential pitfalls on the day of the mediation

While premediation conferences serve many purposes, perhaps the most obvious goal is to clarify the logistics and ground rules for the mediation. Examples of such issues include who will participate in the mediation and whether the parties will make opening presentations.

The pre-meeting can also serve to highlight the interests and settlement options that are important to the client and to narrow the disputed issues. The mediator may, for instance, identify issues or options that he or she believes are not essential to achieving a resolution.

At the conference, counsel also can preview and test the premediation assessment with the mediator, including the perceived strengths and weaknesses of the case. The mediator may provide feedback on issues that counsel and the client had not previously considered, which may lead the client to refine his or her settlement range.

Moreover, the mediator may suggest topics to include in the mediation statement and/or to address with the other party in a joint session or opening statement.

In short, conducting a premediation conference is an effective way to:

1. develop rapport with the mediator,
2. educate the mediator on the dispute, and
3. clarify your client's expectations and goals for the mediation.

## CONCLUSION

Engaging in a premediation assessment is a wise investment of time that has the potential to yield many benefits, including cutting litigation costs and enhancing settlement outcomes.

In addition, the client will enter the process more confidently. This is because the client had a say in setting goals for the mediation at the outset—rather than having to define its objectives in a reactive fashion under time pressures.

The mediation session itself will also prove to be less stressful for counsel and the client because counsel has “done the homework,” having:

1. reviewed important documents,
2. considered the case strengths and weaknesses, and
3. evaluated settlement options.

There should be no surprises; counsel should be unflappable.

While the mediation may not necessarily result in a final settlement, counsel and the client can rest assured that the legal adviser has set his or her client up for the best likelihood of success at the mediation. Counsel has fully prepared; now “go with the flow.”

### Notes:

1. ABA Section of Dispute Resolution Task Force on Improving Mediation Quality: Final Report 7.10 (2008), available at <https://www.americanbar.org/content/dam/aba/migrated/dispute/documents/FinalTaskForceMediation.authcheckdam.pdf>.
2. “Client,” as used throughout this discussion, refers not only to clients of outside counsel, but also to clients of in-house counsel, which may include officers, finance departments, business units, lines of business, and other interested stakeholders.
3. Dwight Golann, “Cognitive Barriers to Effective Negotiation and How to Overcome Them,” *ADR Currents* (Sept.-Nov. 2001), 6–9, available at <https://community.adr.org/docs/DOC-1152>.
4. *Id.* at 7–8.

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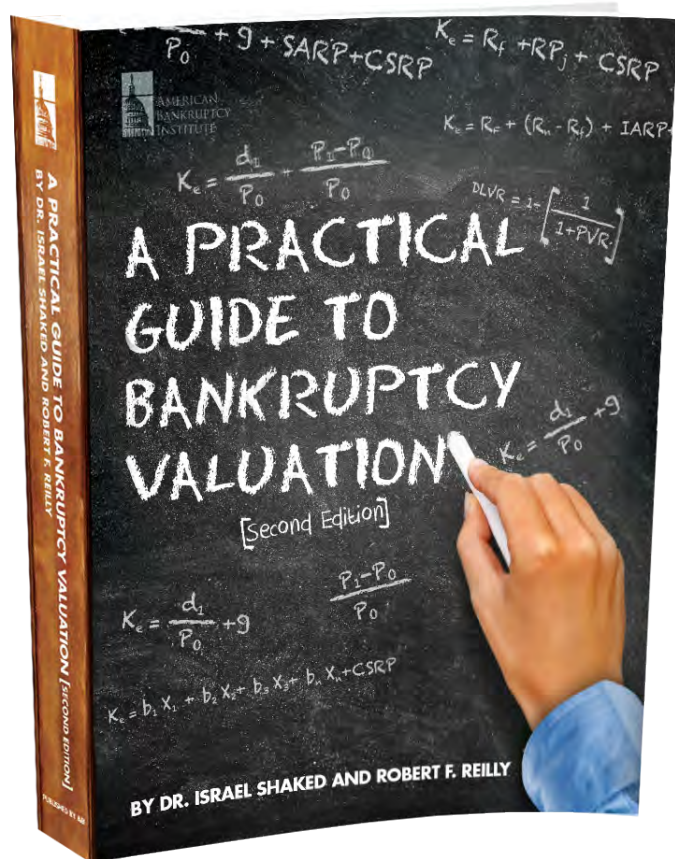
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Just Released . . .

## A PRACTICAL GUIDE TO BANKRUPTCY VALUATION, 2ND ED.

*A Practical Guide to Bankruptcy Valuation* provides practical guidance on the valuation of a business, business ownership interest, security, or intangible asset within a bankruptcy context.



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This book is available for \$115 plus shipping at [http://www.willamette.com/book\\_bankruptcy.html](http://www.willamette.com/book_bankruptcy.html).



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# A PRACTICAL GUIDE TO BANKRUPTCY VALUATION

Dr. Israel Shaked and Robert F. Reilly

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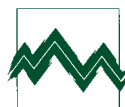
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### Glossary



**Willamette Management Associates**



# The Valuation Analyst—An Independent Expert or a Client Advocate?

Terry G. Whitehead, CPA

*A valuation analyst may be retained to provide a variety of professional services for a number of different purposes. These professional services are intended to achieve the purpose and objective of the particular engagement to which the analyst was retained. However, regardless of the purpose and objective of the assignment, one responsibility for an individual acting as an independent valuation analyst is to remain independent, objective, and unbiased. This statement is true even if the engagement involves a forensic analysis performed within a litigation support or dispute resolution environment.*

## INTRODUCTION

A fundamental professional standard for an individual acting as an independent valuation analyst (“analyst”) is the responsibility to maintain independence. This standard involves the obligation to avoid bias or advocacy in the development of—or the reporting of—a value opinion.

However, in the course of a valuation engagement performed within a litigation or other controversy environment, the analyst may encounter challenges or pressure to blur the line between an independent expert and an advocate for the client.

Professional standards related to independent analysts emphasize the need for independence and the avoidance of bias. The Internal Revenue Service (“Service”) often alleges that analysts merely perform as an advocate for their clients instead of providing an independent value opinion.

Similarly, in non-Service-related disputes, it is common for one litigant party to contend that the analyst working for the other litigant party has become an advocate.

This discussion (1) identifies specific standards of selected valuation governing bodies, (2) summarizes common precedent in Service-related court cases, (3) summarizes examples from recent litigation where analysts have appeared to be an advocate rather than an independent analyst, and (4) identi-

fies analyst caveats for avoiding the appearance of advocacy.

Additionally, in a litigation or dispute setting, it is common for the analyst to not only render an independent opinion of his or her own analysis, but to also review or rebut the analyses or opinions of an opposing analyst. In preparing an appraisal review or rebuttal report, it is appropriate for the analyst to prepare an independent analysis and to not become an advocate for his or her client.

## STANDARDS OF SELECTED PROFESSIONAL ORGANIZATIONS

Valuation analysts are subject to the professional standards and codes of ethics of the valuation professional organizations (“VPOs”) of which they are members. This section identifies certain standards promulgated by the American Society of Appraisers (“ASA”), the American Institute of Certified Public Accountants (“AICPA”), and the Appraisal Foundation.

### American Society of Appraisers

The ASA has promulgated its Principles of Appraisal Practice and Code of Ethics (“ASA Code of Ethics”). The following excerpts describe certain relevant sections of the ASA Code of Ethics regarding the valuation analyst and advocacy.

Section 2.2 (Objective Character of the Results of an Appraisal Undertaking) of the ASA Code of Ethics establishes that, when performing a monetary appraisal, the “numerical result must be developed objectively and without bias. It is unrelated to the desires, wishes, or needs of the client who engages the appraiser to perform the work.”

Section 4.3 (Appraiser’s Obligation of Giving Testimony) specifies that when engaged in a controversy, “It is the appraiser’s obligation to present the data, analysis, and value without bias, regardless of the effect of such unbiased presentation on his/her client’s case.” This section also provides a comment regarding the appraisal expert providing rebuttal services in a litigation assignment.

The comment in Section 4.3 states, “It is perfectly acceptable for the appraiser to rebut the work product of another appraiser, as long as it is done in a manner that is objective, honest, and supported. It is not acceptable to comment about the appraiser, only the work product.”

Section 7.5 (Advocacy) states, “It is unethical for an appraiser to act as an advocate for anything or anyone other than his/her own value conclusion, regardless of the circumstance or situation as the appraiser and the appraisal will lack credibility.”

## American Institute of Certified Public Accountants

The AICPA has promulgated the Statement on Standards for Valuation Services (“SSVS”) and the Statement on Standards for Consulting Services (“SSCS”).

SSVS Section 100.14 (Objectivity and Conflict of Interest) recognizes that “objectivity is a state of mind. The principle of objectivity imposes the obligation to be impartial, intellectually honest, disinterested, and free from conflicts of interest.”

Section 100 of SSCS presents similar language and interpretation.

## The Appraisal Foundation

The Appraisal Standards Board of the Appraisal Foundation develops, interprets, and amends the Uniform Standards of Professional Appraisal Practice (“USPAP”) which was adopted by Congress in 1989 as a source of appraisal standards and qualifications. These standards cover multiple types of appraisal services including real estate appraisals, personal property appraisals, and business appraisals.

Certain VPOs, including the ASA for example, require their members to adhere to the provisions of USPAP.

As part of the conduct provision under the ethics rule of USPAP, “An appraiser must perform assignments with impartiality, objectivity, and independence, and without accommodation of personal interests.” The conduct provision specifically identifies that an appraiser “must not perform an assignment with bias,” and “must not advocate the cause or interest of any party or issue.”

Under the management provision of the ethics rule, “an appraiser must not accept an assignment, or have a compensation arrangement for an assignment, that is contingent on . . . a direction in assignment results that favors the cause of the client.”

## Summary of Selected Standards

As identified in the above-listed standards of certain VPOs, the analysis and work product of an independent valuation analyst should be:

- free of bias,
- untainted by a client’s requests,
- objective and free from a conflict of interest,
- supported by facts, and
- honest and impartial.

## SUMMARY OF SELECTED TAX-RELATED JUDICIAL PRECEDENT

This section identifies selected citations which have been noted in U.S. Tax Court (the “Tax Court”) cases related to the issues of advocacy and independence.

Rule 702 of the Federal Rules of Evidence (“FRE”) dictates that an expert witness may testify if:

1. the expert’s knowledge will help the trier of fact to understand the evidence or to determine a fact in issue,
2. the testimony is based on sufficient facts or data,
3. the testimony is the product of reliable principles and methods; and,
4. the expert has reliably applied the principles and methods to the facts of the case.

Under this rule, the Tax Court has the discretion to determine whether an expert is assisting the trier of fact or merely acting as an advocate of a party. FRE Rule 702 also requires the use of sufficient facts and the reliable application of appropriate principles and methods. The lack of adherence to

the requirements of Rule 702 may result in a determination by the Tax Court that a valuation analyst is an advocate resulting in an expert opinion that is not admissible as evidence .

In the *Estate of Halas v. Commissioner*,<sup>1</sup> the Tax Court opinion included recognition under the ASA Code of Ethics that, “An expert has a duty to the Court that exceeds his duty to his client; the expert is obligated to present data, analysis, and opinions with detached neutrality and without bias.”

The Tax Court historically has cited multiple precedents in the context of valuation cases where experts lose their credibility (and usefulness) when they become advocates for the position argued by a particular party.

Consequently, it is important for the analyst to perform an analysis and render a conclusion or opinion that is based on the relevant facts, resulting in reliable results and a credible opinion, rather than completing an analysis intended to primarily support a client’s desires.

## SUMMARY OF EXAMPLES FROM NONTAX LITIGATION

In 2012, in the bankruptcy matter of *Bachrach Clothing, Inc. v. Edgar H. Bachrach*,<sup>2</sup> one expert’s opinions were described as walking a thin line between expert and advocate. The court concluded that the expert’s analysis was based too much on questionable assessments and hindsight analysis and “often failed to explain the logic behind his choices, ignored actual market conditions and shifted his trial testimony away from some of the positions taken in his deposition.”

In the end, the court determined that the expert was trying too hard to get the conclusions necessary to benefit the client’s case.

The examples cited in the above matter provide insight into potential areas of advocacy and bias including the following:

- Questionable assessments
- Contradiction or changing of opinions between deposition and trial
- Use of hindsight in place of foreseeable events

One area of analysis often subject to professional judgment is the application of the discounted cash flow valuation method. In the previous case, the court noted that although both analysts relied on the same projection and cash flow data, disparate valuations were concluded. The court conceded



that each expert was at times inconsistent by criticizing the other for what each had done as well. Nevertheless, one expert’s explanations were determined to be better reasoned and “aligned with real world events or contemporaneous market data.”

One analyst testified that the significant disparity in conclusions was a result of the following three areas:

1. The weighting of debt versus equity
2. The estimated equity risk premium
3. The estimated size premium

The differences resulted in estimates for the weighted average cost of capital (“WACC”) for the two experts of 11.0 percent and 19.5 percent. The magnitude of the difference in the WACC estimates between the two analysts clearly resulted in the disparate value conclusions.

As a result, from the court’s perspective, the testimony of the analyst with the better reasoned explanations and supported independent data was considered more relevant and appropriate. On the other hand, the testimony of the analyst with assumptions that lacked independent support or basis was considered to favor a particular client and approach an advocacy position rather than unbiased opinion.

Another area of questionable assumptions revolved around hindsight (what actually happened) versus foreseeability (what was known or knowable

at the valuation date). The court was clear in its disfavor of the use of hindsight in this instance when there was no apparent evidence of the future event being foreseeable at the valuation date.

## ANALYST CAVEATS FOR AVOIDING ADVOCACY

As discussed previously, it is necessary for an individual acting as an independent valuation analyst to avoid advocacy or bias in the development of an analysis and conclusion of results. A common description regarding the role of the analyst is that the analyst should only be “an advocate for his or her own opinion.”

In order to accomplish such an objective and limit the potential for bias or appearance of advocating a client’s position, there are certain elements of an analysis that generally assist the analyst in the appearance of independence.

## Verifiable Data and Supportable Assumptions

An analysis should be clear with regard to the important facts and assumptions that were used and relied upon during the course of the assignment. Not only should the analysis be straightforward and transparent, but the report or other work product should be complete and provide sufficient detail regarding information relied upon and data sources.

Additionally, assumptions used in an analysis should be verifiable as to accuracy and/or appropriateness as of the date of the analysis. Assumptions that rely on facts not in existence as of the date of the analysis (i.e., hindsight or hypothetical conditions) may result in a analyst being considered an advocate. The use of data that cannot be verified or independently gathered may also lead to questions regarding the analyst’s conclusions and independence.

## Credible Assignment Results

A specific analysis may enable an analyst to check off all the relevant boxes in terms of verifiable data, supportable assumptions, professional qualifications, and other issues that have the potential to jeopardize the independence of the valuation analyst. However, the failure to produce credible assignment results may still appear to result in advocacy of a client’s position, contradicting an otherwise thorough and complete valuation process.

In the previously identified litigation, two analysts using the same company projections concluded estimates for the company’s WACC of 11.0

percent and 19.5 percent (a nearly 80 percent difference between the low and the high).

It may be reasonable to accept that each analyst will have his or her own professional judgments regarding the WACC development. However, it is also reasonable to conclude that a difference of this magnitude is likely the result of one or both of the analysts blurring the line between independent expert and client advocate.

The credibility of the final assignment results cannot be overlooked simply because the individual steps along the way appear reasonable.

USPAP Standard 9 requires that the development of a business appraisal includes the necessary steps and research to produce a credible appraisal. USPAP Standard 10 requires the reporting of a business appraisal analysis to be communicated in a manner that is not misleading.

Although not all analysts are required to follow the standards developed by USPAP, adherence to such standards may reduce the potential for, and the appearance of, client advocacy when preparing a valuation analysis.

## SUMMARY

It is a simple truth that in most litigation involving valuation disputes, the analyst is retained by one side or the other in the dispute. This fact naturally creates a challenge for the analyst to remain an independent party rather than become part of the team of advocates representing the client.

Still, in order for the analyst to protect his or her reputation, it is important for the analyst to adhere to any relevant VPO professional standards and requirements in order to maintain independence and produce a credible analysis that lacks bias. Although the value conclusion reached may not exclusively favor the client’s position, the analyst should always remain an advocate—but only for his or her own opinion.

### Notes:

1. Estate of Halas v. Commissioner, 94 T.C. 570, 577–578 (1990).
2. In re Bachrach Clothing, Inc., Debtor, 480 B.R. 820 (N.D. Ill., E. Div., 2012).

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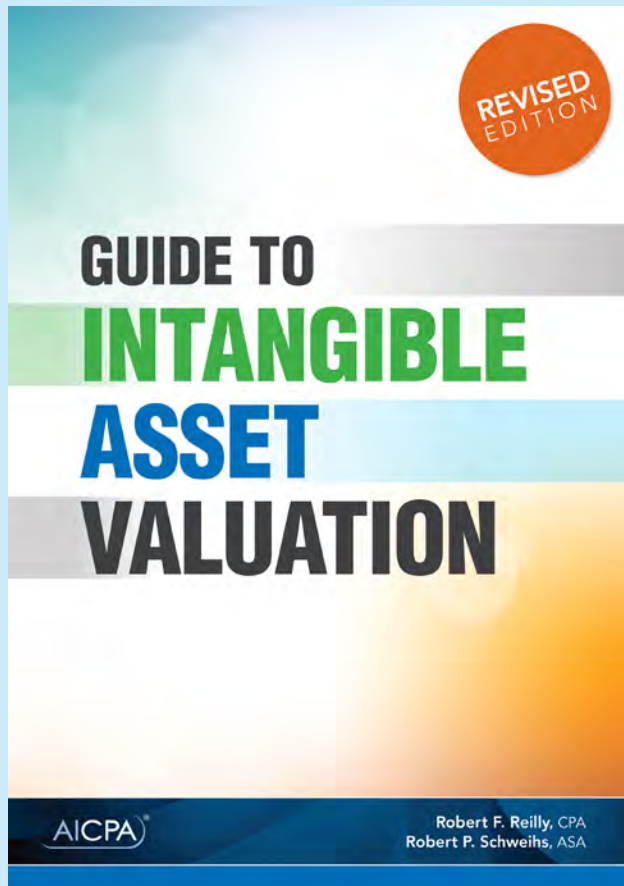




We are pleased to announce the Revised Edition of . . .

# Guide to Intangible Asset Valuation

by Robert F. Reilly and Robert P. Schweihs



This 745-page book, originally published in 2013 by the American Institute of Certified Public Accountants, has been improved! The book, now in hardback, explores the disciplines of intangible asset valuation, economic damages, and transfer price analysis. *Guide to Intangible Asset Valuation* examines the economic attributes and the economic influences that create, monetize, and transfer the value of intangible assets.

Robert Reilly and Bob Schweihs, Willamette Management Associates managing directors, discuss such topics as:

- Identifying intangible assets and intellectual property
- Structuring the intangible asset valuation, damages, or transfer price assignment
- Generally accepted valuation approaches, methods, and procedures
- Economic damages due diligence procedures and measurement methods
- Allowable intercompany transfer price analysis methods
- Intangible asset fair value accounting valuation issues
- Valuation of specific types of intangible assets (e.g., intellectual property, contract-related intangible assets, and goodwill)

Illustrative examples are provided throughout the book, and detailed examples are presented for each generally accepted (cost, market, and income) valuation approach.

## Who Would Benefit from This Book

- Litigation counsel involved in tort or breach of contract matters
- Intellectual property counsel
- International tax practitioners
- Property tax practitioners
- Auditors and accountants
- Valuation analysts
- Licensing executives
- Multinational corporation executives
- Commercial bankers and investment bankers
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# Guide to Intangible Asset Valuation

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# Adding Value in the Process of Selecting a Testifying Expert

Rick S. Nathan

*This discussion considers the selection of a testifying expert in valuation and/or economic damages controversies in connection with a business, security interest, or intangible asset (and intellectual property). The process of identifying, interviewing, and ultimately selecting a testifying expert requires a multidimensional approach on the part of the litigation team.*

*This discussion recommends a decision framework to litigation counsel for purposes of selecting the “right” testifying expert from a “top shelf” slate of candidate experts.*

## INTRODUCTION

Financial consulting experts and testifying witnesses play a wide variety of roles in different controversy matters involving valuation or economic damages analyses in business disputes. As one would expect, determining when a forensic analyst consulting or testifying expert is needed, and then selecting from the candidate experts, is amongst the more difficult tasks that counsel and their clients will address.

There is a significant amount of published literature regarding the role of the forensic analyst expert in the dispute resolution process. Generally, forensic analysts are needed when the facts and circumstances of a case require the trier of fact to reach an opinion that is not easily attainable without the judge being well versed in the relevant domain knowledge.

Moreover, there is a significant amount of literature published about the behavioral aspects of expert testimony—such as being persuasive, competent, knowledgeable, likeable, and confident without arrogance.<sup>1</sup>

The federal standards for expert witness testimony were first crafted through the seminal trilogy of Supreme Court decisions in *Daubert*,<sup>2</sup> *General Electric*,<sup>3</sup> and *Kumho Tire*.<sup>4</sup> The federal expert witness standards are now codified in Federal Rule of Evidence (“FRE”) 702.

With increasing state court adoption of the FRE 702 principles, albeit with much more unsettled governing standards and uniformity, there is no shortage of points of view addressed in the public domain.

Moreover, there are empirical studies on the perceived value—or the differential value—of forensic analyst experts. These empirical studies specify considerations and outcomes without statistical or causative significance.

In fact, one recently published study goes so far as to posit conclusions, perhaps unknowingly, requiring 144 predictor variables based on a survey of 12 licensed attorneys and accounting academics.<sup>5</sup> Suffice it to say that any statistical regression involving just 20 predictor variables would require a sample size of between 80 and 500 participants to be statistically significant.<sup>6</sup>

Finally, a plethora of sources and tools for locating and selecting potential financial experts are available, including several articles that provide general and intuitive guidance.<sup>7</sup>

However, the selection of the forensic analyst expert in valuation or economic damages analyses (involving business enterprises, security interests, or intellectual property) requires a multidimensional approach to identify a “top shelf” slate of candidate experts. However, little has been written suggesting a methodology or “assessment process” to meet this overall objective.

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## “[P]eople tend to seek information to confirm their judgment, rather than to look for possible disconfirming evidence.”

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The objective of this discussion is to demonstrate, by way of example, a robust, reproducible, scalable, and flexible decision-making framework (the “Proposed Model”). The Proposed Model is based on using unstructured data that embody preferences and uncertainties, with a process conducive to negotiation and small group decision-making, to select the “right” expert testifying from a pool of candidates.

The Proposed Model can—but does not require—incorporating such typical considerations as finance or economics expertise, industry domain knowledge, and “on-point” experience with any specific adverse party matter.

### BACKDROP

According to behavioral scientists, people are generally unaware of *how* they make decisions and sometimes *why* they make certain decisions. Moreover, research suggests that people are minimally concerned about the quality of their decisions, but show great concern about the quality of decisions made by *others*.<sup>8</sup>

There are two different types of decisions requiring consideration in an implementation of the Proposed Model, specifically:

1. evaluations or preferences and
2. predictions or beliefs.<sup>9</sup>

Generally, subjective decisions involve intuitive choices and judgment. However, intuitive processes are not adequate for discriminating between testifying expert candidates.

The Proposed Model provides legal counsel, or other professionals involved in the identification of a candidate pool of experts, the ability to manipulate their specialist knowledge using a codified process leading to better decisions in selecting the most compelling forensic analyst expert.

### THE NATURE OF HUMAN JUDGMENT

Research indicates that during a 30-minute hiring interview, the interviewer forms a judgment about a candidate early on, and then spends the greater balance of the discussion seeking confirmation.

Empirical observations suggest that people learn primarily based on what they observe. And, people tend to seek information to confirm their judgment, rather than to look for possible disconfirming evidence.<sup>10</sup>

When interviewing either valuation or economic damages experts, much of the information is redundant—much is also consistent—however, consistency of information without independence adds little to no predictive ability.

Consider a hypothetical example, whereby a search of public record cases shows that a candidate expert testified on behalf of plaintiffs 50 percent of the time for 80 identified cases in the public record. However, the trial team is unaware that 20 percent of all the candidate’s expert cases are not accessible from all records.

The litigation team observes from the cases that the candidate expert’s opinions are objective and independent. This fact does not give rise to caution in hiring this forensic analysis expert. However, each of the cases examined is not by default independent from all cases where that expert has testified.

In statistical terms, the probability that the expert is “plaintiff-neutral” is not 50 percent. Rather, that probability is only 50 percent if that expert testified similarly with a 50/50 objective point of view in the 20 unknown cases.

A litigation team can take two actions to enable better future choices:

1. Bolster memory by benchmarking both past predictions and their basis; this leads to heightened self-awareness of one’s judgment
2. Accept the fact that one does not necessarily learn from experience, and often cannot

Moreover, an effective decision support framework should incorporate the evaluation of alternative preferences. That is, the *evaluative* dimension of what is at stake, and the uncertainties relevant to the decision, that is, the *predictive* dimension.<sup>11</sup>

Figure 1 presents a taxonomy and framework for implementing the Proposed Model.

### STRUCTURING THE DECISION-MAKING FRAMEWORK

Conventional wisdom and typical practice encourages an unidimensional or linear scale in which to measure or differentiate choice. For example, in conflict resolution matters, two parties often see the best solution as a compromise when there may be better solutions requiring creative thinking.



As a result, both parties have the same “question” requiring the same “answer.” Therefore, questions and answers presuppose each other.

A multidimensional scale to measure candidate experts puts emphasis on identifying the right variables, or questions to consider. This is the hard part in a decision-making process. The answers are the easy part, as they are a function of the questions that are considered.

Example questions requiring consideration include the following:

1. Who is (are) the decision maker(s)?
2. What sourcing methods exist?
3. What dimensions should candidate experts be evaluated on?
4. What are the key uncertainties?
5. To what level of detail does the decision need to be structured, what level of detail can it be structured, and on what measurement basis?

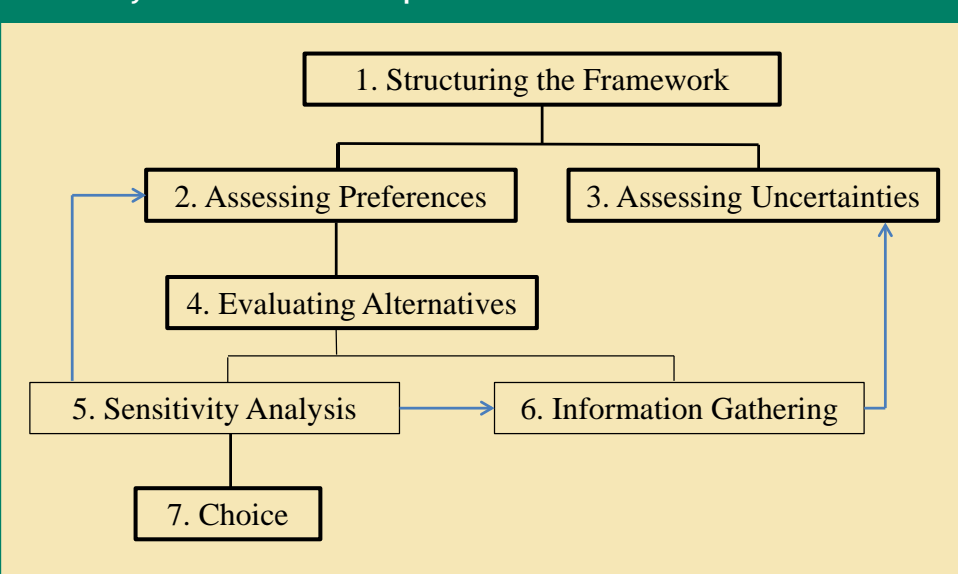
## Decision Makers

Determining the identity of the decision maker(s) is a necessary, but not always evident, step. Lack of clarity can lead to disagreements, and difficulties can arise in the selection process, particularly when multiple parties are involved. What is optimal for one party may not be for another. Differences in opinion will likely have to be reconciled.

When selecting a testifying expert, litigation teams should consider such questions as the following:

1. What departments should be involved in identifying candidate experts, such as subject matter practices (e.g., tax or intellectual property), a specialty commercial litigation practice, or both?
2. Who will “first-chair” any given litigation matter and what witness personalities are seemingly preferred?
3. What client-side participation will be involved, such as inside counsel, the C-suite, board of directors, and to what extent, if any?

**Figure 1**  
**Taxonomy and Framework Implementation**



## Sourcing Candidate Experts

Common sources that litigation teams rely upon in sourcing experts include past precedent, an internal firm database, or external insight with perhaps the most fundamental example being “word of mouth.” However, alternative sourcing practices are not necessarily a given, but should be sought or created.

Imagination in the creation of alternatives greatly increases the scope for choice. For example, imagination might include invoking an “executive search-type” process for greater breadth and depth in outreach.

## Candidate Expert Preferences

Alternative dimensions for assessing preferences should be specified a priori, as opposed to in real time, and align with the overall objective in selecting a testifying expert, such as the following:

1. Testimony experience
2. Academics
3. Certifications
4. Professional associations
5. Past testimony
  - a. Venues
  - b. Subject matter
  - c. Party alignment (i.e., defendant versus plaintiff; court or jurisdiction, etc.)
6. Relevant publications or presentations
7. Past industry functional or line management expertise

## Identifying Important Uncertainties

While assessing uncertainties is a separate step in the decision-making process, it is important at the outset to establish what the uncertainties are. For example, consider the following:

- Geographic restrictions for sourcing candidate experts
- Client fee barriers
- Expert conflict checks
- Personality clashes
- Accessibility
- “Bench strength”

## Measurement of Dimensions

Perhaps of most importance is defining the measurement basis for “scoring” evaluative and predictive dimensions within a pool of candidate experts.

Nominal data are items differentiated by a simple naming system. A nominal scale simply establishes that items have something in common, even if not described. Nominal items may have numbers assigned to them, but they are only used to simplify capture and referencing (e.g., the number pinned on an athlete or a set of countries).

Nominal items are usually categorical, in that they belong to a definable category, such as “accountants,” “economists,” “financial experts,” “professors,” “title in organization” (partner versus director), and so forth. Nominal data do not comport to a measurement scale.

Items on an ordinal scale are set into order by their position on a scale. This may indicate temporal position, such as deciles, quartiles, or rank, and so forth. The order of items defined is often by assigning numbers to them to show their relative position. Letters or other sequential symbols are also assignable, if appropriate.

Ordinal items are usually categorical, in that they belong to a definable category, such as the number of years of experience, number of jury versus bench trials, number of plaintiff versus defendant representations, and so forth. Moreover, ordinal numbers cannot be manipulated through arithmetic, they show sequence only.

Interval measurements are along a scale in which each position is equidistant from one another. This allows for the distance between two pairs to be equivalent in some way. This is often used to measure attributes along an arbitrary scale between two extremes (e.g., rating a potential expert between 1 and 10 along a dimension, etc.). Like ordinal data, interval data are not multipliable or dividable.

In a ratio scale, numbers compare multiples of one another. Important also, the number zero has meaning. Thus, the difference between a person of 35 and a person 38 is the same as the difference between people who are 12 and 15. A person can also have an age of zero.

Ratio data can be multiplied and divided. This is because not only is the difference between one and two the same as between 3 and 4, but also that 4 is twice as much as 2 (e.g., number of books or articles written, number of times quoted, percentage of cases deemed successful, etc.).

Interval and ratio data measure quantities and hence are quantitative, and are often referred to as “scale data” because they measure items on a relative or differential basis.

Moreover, interval and ratio data are parametric, and measured with tools such as distributions that are predictable, and often normal. Nominal and ordinal data are nonparametric, do not assume any distribution, and can only be measured with tools such as a histogram.

Data measured on a continuous scale are dividable into fractions, such as temperature. Continuous variables allow for infinitely fine subdivision, which means if you can measure data sufficiently and accurately, you can compare two items and determine the difference.

Discrete items or variables measure fixed values, such as age in years, and often on arbitrary scales, such as scoring your level of happiness, although such scales can also be continuous.

The following illustrative implementation of the Proposed Model relies on the use of ratio metric scale data, which allows for both evaluative and predictive measurement being considered.

## ASSESSING PREFERENCES

The dimensions of choice reflect evaluative judgment or preferences. There are two major issues at this stage, namely, dimensional adequacy and combinatorial power.

First, how adequate are the measures of the dimensions for comparing alternatives? How well does the selection criteria cover all relevant domains? Has an important dimension, for example, “character,” been omitted? Where and how are the measures of the dimensions obtained? How do you judge a person’s motivation or intelligence? Will you need outside assistance—from who?

Second, what scheme will best combine or weight differing dimensions taken individually and in whole?

By way of example, Figure 2 illustrates an example construction of preferences. The preferences are considered on a relative basis to each other, and define a single weighted average metric for vetting the evaluative dimension of candidate experts.

## ASSESSING UNCERTAINTIES

The uncertainties of choice reflect predictive judgments or beliefs. There are two major issues at this stage as well.

First, what information is relevant to the uncertainties? Second, what people or resources can provide information, to make the necessary probabilistic judgments?

A single overall metric to discriminate candidate experts may reflect the weighted average consideration of such uncertainties as cost or fee barriers, accessibility, and potential business conflicts of interest, among others.

Typically, uncertainties are quantifiable in terms of probabilities. For example, what is the chance that expert services from the “Big-4” will cost, on a weighted average team basis, greater than \$400 per hour? What is the chance that a certain professor in academia will not be readily available? How much risk is the firm willing to assume, if any, that a business conflict could be perceived, in hiring a candidate expert?

## EVALUATING ALTERNATIVES

At this stage, combining the criteria and constructing a decision rule is required, such as weighting the assessed dimensions with the assessed uncertainties. This method of evaluating alternatives emphasizes the importance of separating evaluative or preference dimensions from predictive or uncertainty dimensions.

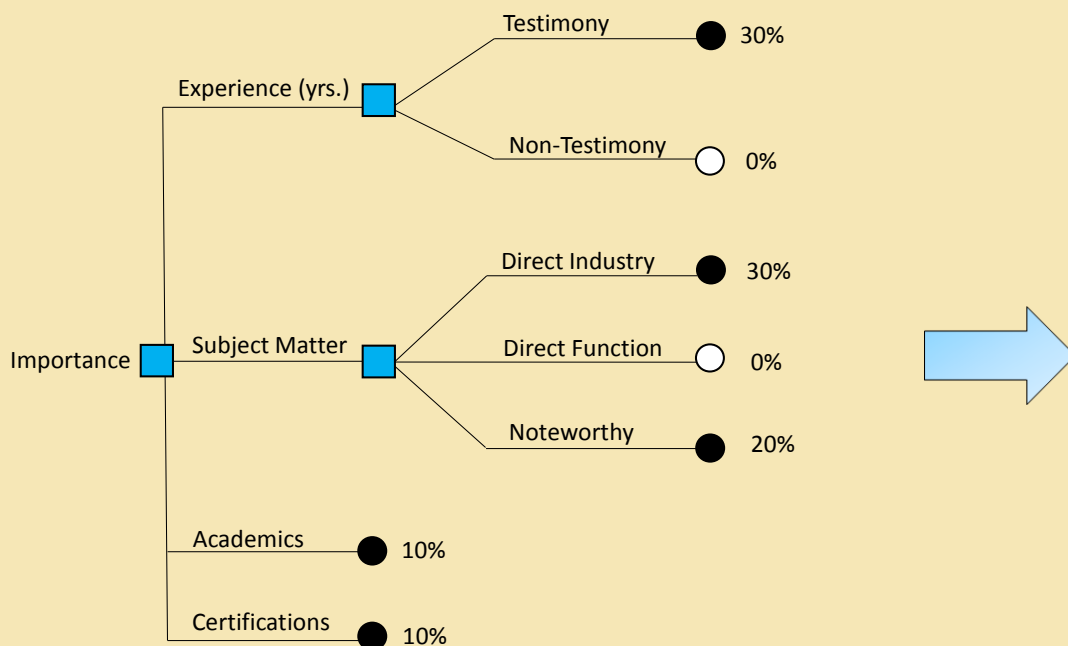
Although the relative values of alternative experts combine preferences and uncertainties, the assessment of preferences is independent from the assessment of uncertainties, to avoid the pitfalls of “wishful thinking” (or “persecution mania”).<sup>12</sup>

Figure 3 continues with the example assessment combining independent evaluative dimensions of preferences above, with independent predictive dimensions of uncertainties below, for vetting candidate experts.

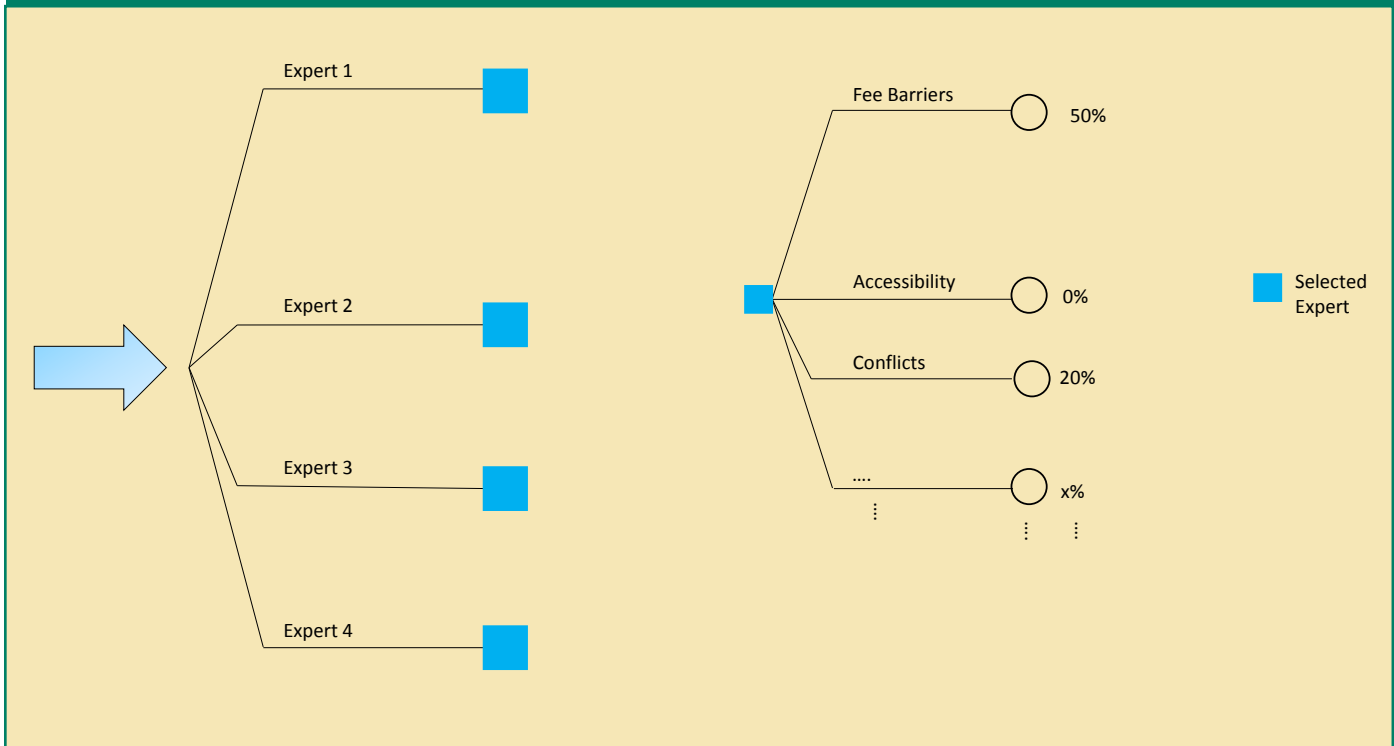
## SENSITIVITY ANALYSIS

The objective of sensitivity analysis is to estimate to what degree are evaluated preferences and predicted uncertainties incorrect. In other words, what degree of variation in the inputs of assessed preferences and uncertainties would change the decision indicated when evaluating alternative candidate experts?

**Figure 2**  
**Decision Tree for Vetting the Evaluative Dimension of Candidate Experts**



**Figure 3**  
**Decision Tree for Vetting Candidate Experts**



Sensitivity analysis is rooted in varying the estimated evaluated preferences, using different weighting schemes and the probability of events. In other words, what is the extent to which the decision is sensitive to such changes? Sensitivity analysis is important for two major reasons.

First, most inputs to the decision are subjective. If the choice between two candidate experts is relatively insensitive to ranges of inputs as opposed to point estimate values, this provides some answer to the question concerning how wrong evaluated preferences and predictive uncertainties can be, and yet not affect the decision process.

Second, when people disagree concerning subjective inputs to a decision, disagreement does not necessarily imply different actions. Through sensitivity analysis, one can test the extent to which actions—that is, hiring candidate expert “A”—are compatible with ranges of opinions and values (i.e., weights accorded to dimensions of preferences).

## INFORMATION GATHERING

An important outcome of sensitivity analysis can be the revelation that the decision is sensitive to lack of knowledge concerning certain dimensions—that is, there is a need for more information. At the same

time, the analysis should also take into consideration the costs and benefits of securing additional information.

What are the costs and benefits of securing additional information? Such costs include “soft costs” such as the delay in deciding (i.e., the cost of deferral).

Perfect information suggests that decisions are always correct. Suppose that when testimony experience is highly weighted, a selected candidate always reflects the “right” testifying expert and never results in a compromised choice. In this case, the probability of placing great weight on testimony experience increases the chances of picking the right testifying expert.

The following notation can illustrate this dependency:

$\Pi$  (great weight on testimony experience | always results in selecting the right testifying expert) = 1, where  $\Pi$  represents probability. However, because probabilities should add up to 1, we should also have the condition that  $\Pi$  (little weight on testimony experience | always results in selecting the right testifying expert) = 0.

Nevertheless, this is only half the story. Selecting the right expert should also never result by placing less weight on testimony experience. There should



be no chance that placing higher weight on testimony experience results in not choosing the right expert, or,  $\Pi$  (great weight on testimony experience | always results in not selecting the right expert) = 0.

Notice the difference between this probability statement and the preceding probability statement. Both statements are “conditional probabilities,” but the conditions are different.

If information is perfect, one will always select the right testifying expert. If prior testimony experience is highly important, then there is no doubt in selecting the right testifying expert. Having used conditional probabilities to model perfect information, we can use a statistical construct known as Bay’s Theorem to “flip” the probabilities, and show that there is no uncertainty in placing great weight on testimony experience.

We want to know that  $\Pi$  (always choosing the right expert | always results from placing great weight on testimony experience) = 1.

Let us define the following variables:

- A = Selecting the right testifying expert
- B = Selecting the wrong testifying expert
- C = Highly weighting testimony experience
- D = Placing little weight on testimony experience

Now by applying Bay’s Theorem,<sup>13</sup>

$$\Pi(A|C) = \frac{\Pi(C|A) \times \Pi(A)}{[\Pi(C|A) \times \Pi(A) + \Pi(C|B) \times \Pi(B)]} =$$

$$\frac{1 \times \Pi(A)}{1 \times \Pi(A) + 0 \times \Pi(B)} = 1$$

Note that the *posterior* probability,  $\Pi(A|C) = 1$ , regardless of the *prior* probability,  $\Pi(A)$ . This is because of the conditional probabilities that are used to represent highly weighting expert testimony experience as the perfect choice. This is not typical in the real world.

In real choices, one rarely can eliminate uncertainty altogether. If highly weighting testimony experience sometimes results in choosing the wrong expert, these conditional probabilities would not be 1s and 0s, and the posterior probability would not be 1 or 0—there still would be some uncertainty about what would happen.



Information gathering follows sensitivity analysis, since it would be a waste to collect additional information on something that had little effect on the decision.

## CHOICE

At this point, the litigation team should consider whether there has been sufficient analysis of the decision, relative to the costs, benefits, and constraints of the facts and circumstances. Which alternative candidates have the greatest chance of being the right testifying expert? In the final analysis, counsel should select the testifying expert with the greatest chance of being right.

Although the Proposed Model has been shown in a step-by-step process, in practice there is considerable recycling between steps. The process of analysis often indicates new alternative candidates, or dimensions of evaluation and prediction.

Moreover, while the aim of the Proposed Model is an explicit quantitative decision process, the use of sensitivity analysis enables one to see how quantitative the decision process needs to be. This is important because most of the dimensions are subjective.

If different members of the litigation team independently utilize the Proposed Model, selecting the right expert highlights the real extent of agreements and their relative importance.

By decomposing the selection process in this manner, it is possible to synthesize the opinions of different decision makers with different domain knowledge, to the extent their knowledge relates to different dimensions of choice.<sup>14</sup>

## THE IMPORTANCE OF INSTITUTIONALIZING FORENSIC ANALYST EXPERT SELECTION

The motivation for developing the Proposed Model is severalfold. Perhaps one significant example stems from empirical outcomes of recurring *Daubert* challenges.

According to one yearly study of *Daubert* trends and outcomes, 51 percent of financial expert testimony was excluded in 2016, the largest exclusion rate experienced between 2000 and 2016.<sup>15</sup> Both fully and partially excluded testimony comprise the overall exclusion rate. In fact, partial exclusion is a growing trend, as triers of fact want greater flexibility in admitting expert testimony over an all or nothing proposition.

It is probably no surprise that accountants, forensic analysts, and economists are the three most common types of financial expert witnesses, although actuaries, financial analysts, and academicians also comprise the mix.

However, it is interesting to see whether any type of financial experts experience higher exclusion rates. According to the study in 2016, economists had the highest number of *Daubert* challenges, and accountants had the highest exclusion rates of the three most common types of financial experts.

Between 2000 and 2016 in total, economists have been least frequently excluded, both accountants and analysts largely shared the same exclusion rates, and other financial expert types experienced the highest exclusion rates.<sup>16</sup>

While exclusion statistics of empirical expert challenges may or may not be surprising, past is not prologue. And, selecting the right forensic analyst expert is no easy matter. It is far better to systematize that choice, to the extent possible, to benchmark success in hiring the most likely qualified financial expert, in any given matter.

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# Perspectives from a Business Governance Attorney regarding Delaware Fair Value Litigation

Michael J. Zdeb, Esq., and Kevin M. Zanni

## INTRODUCTION

The perspective of a practicing attorney is primarily influenced by both historical securities litigation decisions and personal experience. In order to provide a practitioner perspective, this discussion includes thought leadership on the current state of corporate security transactions from a practicing business governance attorney.

Michael J. Zdeb is a partner in the Chicago office of Holland & Knight. Michael represents equity participants and businesses in shareholder disputes and in corporate governance matters. His experience includes matters involving shareholders and members in limited liability companies, as well as partnership disputes.

Michael utilizes his own business and tax experience and works with a team of experienced valuation analysts and litigators to ensure the best possible outcome for his clients. More often than not, this approach has resulted in creative settlements and resolutions that take into account the specific needs of the client, the financial aspects of the business, and other dynamics of the business.

Michael has a background in valuation matters, and, in particular, in the valuation concepts involved in the “fair value” standard of value employed by courts in shareholder appraisal rights and breach of fiduciary duty claims. Michael also serves as counsel to international and domestic businesses in the manufacturing, distribution and logistics, consulting, and telecommunications industries.

The *Insights* editorial team brainstormed to develop questions in the securities litigation discipline that should be of interest to our readers. We

then presented our questions to Michael. We hope you find Michael’s thought leadership as informative as we did.

## QUESTIONS AND ANSWERS

**Zanni:** *In re Appraisal of Dell Inc.* (2016, Del. Ch.), the court recognized that certain financial buyers use leveraged buyout (“LBO”)-based models to calculate a business purchase price. LBO-based financial models are typically based on the purchase price that a private equity investor will pay in order to achieve a certain internal rate of return.

The court further noted that an LBO-based purchase price does not necessarily equal the fair value of the subject business enterprise.

How do you interpret the court’s ruling in *Dell* (i.e., to ignore the actual merger price in favor of a purchase price based on the discounted cash flow valuation method)?

**Zdeb:** The *In re Appraisal of Dell, Inc.*, judicial decision is 114 pages of a comprehensive explanation of why the Vice Chancellor rejected the merger consideration as being indicative of the company’s fair value.

The decision in *Dell* and other recent cases have resulted from a number of developments: the Delaware requirement that the Chancellor determine “fair value” with consideration of:

1. the deal price not being presumptively equal to the fair value,
2. the delays that can occur between the announcement of a deal and the actual

closing and the market developments during that time gap,

3. the differences in the liquidity of the public market versus the private merger and acquisition market, and
4. the requirement that synergies be disregarded.

The *Dell* decision is a pointed reminder that “operative reality” is the context in which the fair value valuation takes place. The operative reality in this case included a marketplace that the court found did not reflect the significant investments and new business model of the company.

I view the *Dell* decision as one that is likely limited to some specific facts and circumstances. That is, *Dell* is a case involving a management leveraged buyout with limited financial bidders and a “market valuation gap.”

The court noted the context of a management-led buyout of a large and complex company where limited competition in the bidding process occurred. The court saw the public market as not reflective of the operative reality of the company at a time when a significant long-term investment and reshaping of the company was in its nascent stage.

Since the determination of fair value is to take into account all relevant facts and considerations, these considerations undermined the position that the merger price was indicative of “fair value.”

Specifically, the court noted that, in considering all relevant factors, fair value would include consideration of those elements that might throw light on the future prospects of the company. In that context, the transaction advisers and the bidders used current market data with a leverage buyout model— while Mr. Dell had been publicly stressing the long-term view of the recent reshaping of the company.

I believe the court was heavily influenced by both (1) the leverage buyout approach of the financial advisers to the board as well as (2) the limited bidder activity. As the court noted in its judicial decision, the LBO model solves for a value that produces a return relative to the risk level that the financial bidder is willing to take. The LBO model does not solve for the intrinsic value that the court is required to determine as “fair value.”

Once the court determined that the deal price was not indicative of that intrinsic value, it conducted its own fair value determination—not limited to an LBO model that produced “outsized returns.”

**Zanni:** In your view, how important are value indications from third-party financial buyers—as compared to third-party strategic buyers—in dissenting shareholder appraisal rights litigation?

**Zdeb:** It is an interesting topic. On one hand, financial buyers are using current market data and solving for a risk-reward value. The current market pricing may not be indicative of:

1. the relative information available to the public and
2. the differences in market liquidity for the shares versus the company.

In addition, as the court noted in the *Dell* decision, the financial model might be designed for “outsized returns.” The financial buyer has investments in winners and losers and seeks returns for its investors with that backdrop of requiring greater returns for greater relative risk.

The strategic buyer presents other concerns, mainly the prospect of the deal price being reflective of a synergistic value (and not a fair value). Under Delaware appraisal law, synergistic value should be disregarded.

Both types of transaction participants present issues and require thoughtful analysis. Neither may be indicative of “fair value.” *Dell* and other recent cases demonstrate that this issue can occur when:

1. there is a lack of robust bidding process,
2. there are indications that the market pricing may be missing some element of value in the operative reality, or
3. the price was driven by synergies that the buyer hoped to realize.

**Zanni:** In your own words, describe the legal concept of shareholder appraisal rights in Illinois. Are the legal protections offered to dissenting, noncontrolling shareholders adequate, biased, or relatively fair? Has the level of this shareholder legal protection evolved over time?

**Zdeb:** The concept of the oppression of a noncontrolling shareholder has been in the Business Corporation Act of Illinois since about 1933. However, it is only more recently that the courts have addressed this concept.

Rather than focus on a statutory approach to oppression, Illinois long ago recognized that, in a closely held business, fiduciary duties existed that the traditional corporate model did not



address. The approach in Illinois has been similar to the *Donahue* approach in Massachusetts. Duties exist among shareholders that are more similar to those that exist in partnerships—the duty of loyalty, the duty of good faith, and fair dealing.

As for the legal concept of “oppression,” the definition is frequently equated with the “reasonable expectations” standards. That is, if the parties in control of the company defeat by their actions the reasonable expectations of the other shareholders, a statutory action for dissolution may exist. The focus of this approach is on the expectations.

An alternative approach exists with more of a focus on the conduct of those in control and of the company—whether it is unduly prejudicial, harsh, and unfair. In most cases, the result will be the same.

What may be somewhat unique in Illinois is the approach to the remedies that will be triggered. By statute, a finding of oppression allows the court to order a wide variety of remedies that are specifically listed. In addition, the Illinois statute allows for any other remedy that the court would find equitable under the circumstances.

In most other jurisdictions, the remedies, other than disputes, are not specifically set out by state statute and are a matter of judicial interpretation.

In my experience, the most frequent remedy is an order to have the oppressed shareholder bought out at a “fair value” price. I believe this is a result of the recognition that any other remedy is not likely to resolve the differences among the parties and would continually involve the court in disputes between the parties.

Illinois has a specific statutory definition of “fair value.” It is the value of the business enterprise without a discount for lack of control nor—except in extraordinary circumstances—a discount for lack of marketability. In effect, fair value is the proportional total business enterprise value, discounted for a lack of marketability only in extraordinary circumstances.

This same fair value definition exists by judicial interpretation in several other jurisdictions. However, in Illinois, this definition is explicitly set out in the statute.

**Zanni:** In *Corwin v. KKR Financial Holdings LLC*, the Delaware Supreme Court held that the business



judgment rule is the appropriate standard of review for a post-closing damages action when a merger not subject to entire fairness has been approved by a fully informed and uncoerced controlling interest of disinterested stockholders.

How do you view the *Corwin* decision? Because of the *Corwin* decision, do you anticipate any changes in the number of dissenting shareholder appraisal rights case filings?

**Zdeb:** The *Corwin v. KKR Financial Holdings LLC* decision is indicative of a trend in Delaware to apply the business judgment standard of review to post-closing claims—rather than entire fairness or enhanced scrutiny—where a fully informed, uncoerced vote of disinterested stockholders approved the transaction. *Corwin* has been considered in two more recent decisions:

1. *City of Miami Gen. Employees v. Comstock* (August 24, 2016) by Chancellor Bouchard
2. *Larkin v. Shah* (August 25, 2016) by Vice-Chancellor Slight

The two more recent judicial applications have left some observers to wonder if the “cleansing” effect applies if there was a controlling stockholder or a conflicted board. The “cleansing” effect of such a vote is likely to reduce the number of post-closing claims—absent a conflicted board or a controlling stockholder.

**Zanni:** Based on your experience, do you see any current trends developing in shareholder appraisal rights litigation matters or in shareholder oppression

matters (e.g., more filings now than in prior years, different types of filings, or other issues)?

**Zdeb:** I have noticed a couple of trends, the most recent being the weight to be given to deal consideration in the shareholder appraisal rights proceedings regarding fair value. Recent cases have found both the consideration indicative of fair value and, in others, the consideration was disregarded.

The acceptance or rejection of a deal price in a transaction has been a hot topic in Delaware for a couple of years now. *Dell* is one of a number of cases in which the deal price was not considered to be indicative of the fair value, thereby leading the court to conduct its own discounted cash flow method valuation analysis.

The recent judicial decisions point out that a robust process with independent boards is likely to produce a value to which the court will give weight. This view was again stated in *In re Appraisal of Petsmart, Inc.*, on May 26, 2017, by Delaware Vice-Chancellor Glasscock. In that case, the court found that a public sales process that develops market value is often the best evidence of “fair value.”

In many respects, the exception is the leveraged management buyout in *Dell* (1) where there was a demonstrable “market gap” in value with an LBO model solving for “outsized returns” or (2) where the process of the board was lacking independence. In *Dell*, a control group existed and the company sale process was not “robust” or conducted in a way to gain the best price.

**Zanni:** Are there any relatively current legal decisions that you find interesting, and why?

**Zdeb:** I am following the developments regarding two topics.

The first topic that has interested me is the application of the size premium in establishing a present value discount rate. A large number of studies and professional publications are debating the effect of the size premium, in particular the “10th decile,” in the valuation of private companies under the “fair value” standard of value.

To date, the Delaware Chancery has not rejected the application of a size premium due to the arguments that it contains an impermissible element of lack of marketability or lack of liquidity. The effect of the size premium—and the implications of a lack of liquidity in the 10th decile—are hotly debated matters.

In my view, the cases in which the attempt to exclude or modify the application of the 10th

decile premium have not convinced the court of the ability to identify the extent of the impermissible element or the manner in which an adjustment would be made. It is possible, in time, that the valuation profession will be able to demonstrate to the Chancery the effect of illiquidity in the 10th decile premium.

At least one study has advanced a methodology, which, as of this date, has not been presented to the court. The implications of any decision by the Chancery to reject or allow for such adjustments are significant. While the Court in unusual circumstances has made adjustments in the past, an approach with a method to be applied generally has not been accepted.

The second topic that has interested me is the impact of synergies in the determination of “fair value” in shareholder appraisal rights proceedings. In a case decided in May 2017, without going into the level of details present, the petitioners in the appraisal rights proceeding were able to convince the court that the sales process was structurally defective as a means of indicating market value.

In addition, the respondent company was able to demonstrate that the price included a significant effect of synergistic value that the buyer could create following the acquisition.

Delaware appraisal law requires synergistic value to be disregarded. The “fair value” standard is the value of the company as a going concern—and not its value to a specific third party as an acquisition.

As a result, the court was guided by the adversarial presentations of the parties and was convinced by both sides that the transaction value was not indicative of “fair value.” In addition, the respondent was able to convince the court that the holding company faced significant challenges in its ability to raise capital and meet regulatory approvals.

The court then conducted its own discounted cash flow method valuation analysis, and the court found the share fair value to be less than the actual deal price.

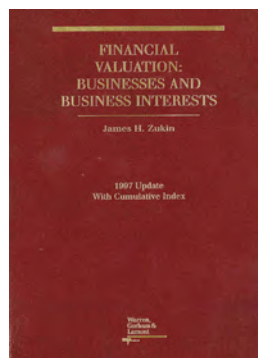
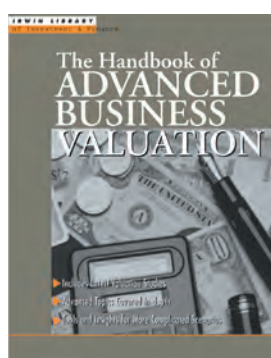
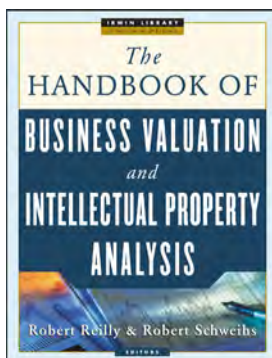
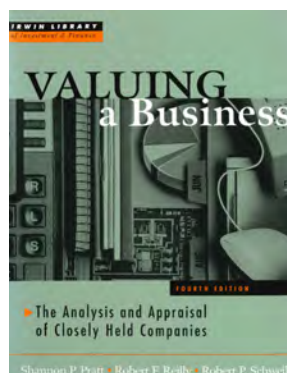
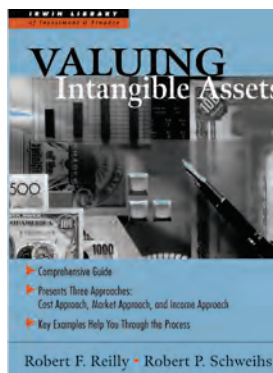
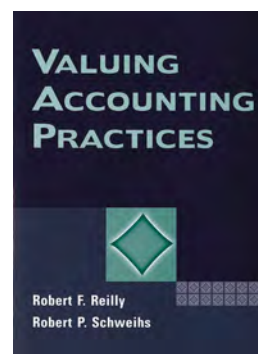
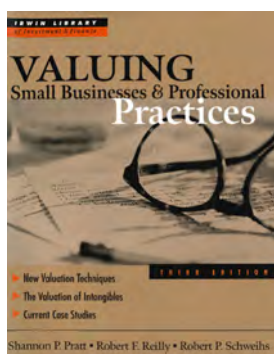
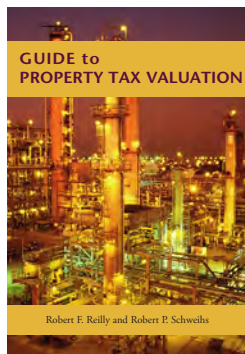
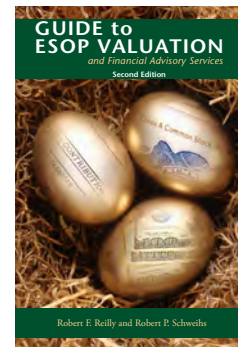
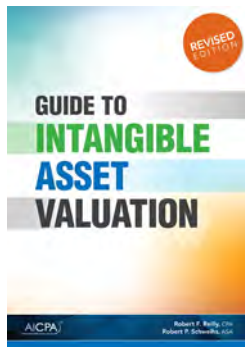


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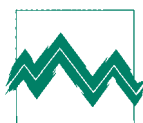
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# Dell Inc. Management Buyout—Why the Delaware Chancery Court Determined a Higher Fair Value after Appraisal Rights Proceeding

Samuel S. Nicholls

*In the matter of In Re Appraisal of Dell Inc., tried before the Delaware Court of Chancery, dissenters appraisal rights were petitioned by shareholders who held 5.2 million shares following the management buyout of Dell by its founder Michael Dell and by Silver Lake Partners. The Chancery Court concluded that the fair value per share was 27 percent greater than the actual merger price per share. This discussion (1) describes and analyzes the facts of the case, (2) provides a chronological time line of the company sale process, (3) summarizes the Chancery Court's reasoning for its judicial decisions, and (4) lists—and explains—the judicial precedents cited in the Chancery Court memorandum opinion.*

## INTRODUCTION

Dell Inc. (“Dell”), which arguably was the pioneer in affordable, high quality, Windows-based personal computers (“PCs”), announced on February 5, 2013, its intent to go private by way of a leveraged management buyout (“MBO”) transaction.

At the time of the MBO transaction, the market for PCs had experienced a significant decline in sales growth. This decline was due to competition from smartphones and tablet computers. This competition had pressured the Dell stock price.

The MBO transaction acquirers were Michael Dell, the company founder and chief executive officer, and Silver Lake Partners, L.P. (“Silver Lake”), a private equity firm. At the insistence of Michael Dell, due to his role as both an insider and counterparty to the company sale process, a special committee was formed to (1) marshal and supervise the sales process, (2) analyze financial forecasts for the purpose of estimating fair value, (3) evaluate submitted bids, and (4) negotiate with bidders.

Following due diligence by a handful of private equity firms and a failed attempt at a strategic merger, the MBO transaction was approved by a majority of shareholders (57 percent) and closed on October 28, 2013. Technically, the transaction was structured as a merger rather than an acquisition. This was because the company was merged into a shell entity with Michael Dell contributing his shares to that entity.

The total consideration was \$24.9 billion, consisting of \$13.75 per share in cash (a 25 percent premium over the closing stock price on January 11, 2013, the day before rumors circulated), plus a special dividend of \$0.13 per share. After the MBO transaction closed, Michael Dell had increased his ownership interest to 75 percent from 16 percent, and Silver Lake owned approximately 25 percent.

Dissenting shareholder appraisal rights were sought by certain noncontrolling shareholders who held 5.2 million shares of the 1.8 billion diluted shares outstanding. The dissenting shareholder appraisal rights action was entitled *In Re Appraisal*



of Dell Inc. (“Appraisal of Dell”) and tried before the Delaware Court of Chancery (the “Chancery Court”).

On May 31, 2016, Vice Chancellor J. Travis Laster of the Chancery Court ruled in favor of the petitioners and held that the fair value price per share of the common stock of Dell at the time of its sale to the MBO group was \$17.62 per share.<sup>1</sup> That judicially concluded fair value per share was 27 percent higher than the total consideration price per share.

## SELECTED FACTS CONVEYED IN THE APPRAISAL OF DELL OPINION

The following discussion presents selected facts conveyed in the *Appraisal of Dell* memorandum opinion (“Opinion”) by the Chancery Court.

### No Breach of Fiduciary Duty by the Board of Directors

The Chancery Court found no evidence of a breach of fiduciary duty, and in fact, wrote that the special committee “did many praiseworthy things, and it would burden an already long opinion to catalog them.”<sup>2</sup>

In the legal analysis section of the Opinion, the court noted that there was no evidence that Michael Dell sought to create a “valuation disconnect”<sup>3</sup> so as to take advantage of it. Rather, Michael Dell fretted over institutional investors’ misunderstanding of the company’s intrinsic value, and tried his best to convince investors that the company was worth much more than its publicly traded price.<sup>4</sup>

However, the Chancery Court found that certain aspects of the company sale process called into question whether fair value had, in fact, been offered as consideration.

### Management Buyouts Should Be Evaluated More Thoroughly

The Opinion references judicial precedent and legal literature that suggest MBO transaction-related deals should be scrutinized more thoroughly than transactions with strategic buyers in which management will not be retained.<sup>5</sup>

### The Sale Process Had Certain Identified Flaws

The petitioner’s expert witness was Professor Guhan Subramanian. Professor Subramanian advised the

court about the limitations of a go-shop period, particularly after a pre-signing phase of the sale process that consisted of few bidders and who would be partnered with the founder by way of an MBO.

The Opinion discussed the limitation at length, as well as the apparent focus by the Dell financial advisers on the leveraged buyout (“LBO”) pricing model—rather than on the discounted cash flow (“DCF”) valuation method.

## Chancery Court Recognized That Neither the Merger Price per Share Nor the Publicly Traded Price per Share Were Equivalent to Fair Value

The Opinion cited numerous academic papers supporting the conclusion that a company’s publicly traded price per share can depart from its fair value price per share (“valuation gap”). This valuation gap issue can sometimes be an issue when a company is involved in changing its business model.

Supporting the theory that there was a Dell valuation gap issue was evidence provided by certain value estimates that were significantly higher than the stock price. Roughly a year and a half before the onset of the sale process, Dell management performed a sum-of-the-parts valuation analysis that had valued the company at \$22.49 to \$27.05 per share, while the stock price traded around \$14 per share.<sup>6</sup>

Early in the sale process, during October 2012, a Dell transaction adviser, JPMorgan Chase & Co. (“JPMorgan”), estimated a value range of \$20 to \$27 per share by one of its scenarios applying the DCF method. At the same time, the Dell publicly traded stock price was trading between \$9 and \$10 per share.<sup>7</sup>

Although the financial projections used for the JPMorgan analysis were found to be too optimistic, a significant valuation gap of this magnitude may deserve added scrutiny.

### Additional Considerations Not Addressed by the Opinion

The Chancery Court took issue with the focus on the use of LBO models in determining the merger price. However, the court did not address the fact that an internal rate of return (“IRR”) is based on a finite beginning and ending date—in this case roughly five years—which may not be appropriate for a turnaround situation.

Dell was in the midst of a transformation to diversify its revenue. This transformation project was intended to transition Dell business efforts away

from PC sales. The transformation efforts were not expected to be implemented for around five years, and, therefore, the financial benefits of the transformation would not have been included in the LBO valuation models.

Alternatively, a DCF valuation analysis that includes a terminal value would include the benefits of restructuring and new initiatives beyond five years if modeled out longer than five years. The terminal value income component, which is often capitalized at the weighted average cost of capital minus the projected long-term growth rate, would also capture those results beyond five years.

This terminal value consideration may explain the valuation gap between the LBO valuation models and the internally generated sum-of-the-parts valuation estimated by Dell management in January 2011,<sup>8</sup> approximately a year and a half prior to when Michael Dell began to consider an MBO.<sup>9</sup>

The sum-of-the-parts valuation analysis estimated the value at \$22.49 to \$27.05 per share, significantly higher than the publicly traded stock price at the time of around \$14 per share, and the acquisition price of \$13.75 per share on October 28, 2013.

## SEQUENCE OF EVENTS PRIOR TO AND DURING THE SALE PROCESS

Because this transaction was structured as an MBO, the company sale process was given added scrutiny by the Chancery Court. The relevant sequence of events in this matter was as follows:

- 2009 – Faced with increasing competition from (1) low cost foreign manufacturers, (2) the introduction and popularity of smart-phones and tablets, and (3) cloud-based storage services (affecting Dell's market for servers), Dell management decides to offer enterprise software and services in order to diversify away from the market for personal computers.
- 2010–2012 – Dell acquires 11 companies for \$14 billion.
- January 2011 – Dell conducts an internal analysis of the company's intrinsic value. Its sum-of-the-parts valuation analysis provided a per-share value of between \$22.49 and \$27.05.
- June 2012 – Southeastern Asset Management, Inc. ("Southeastern"), proposes to Michael Dell that he consider pursuing an MBO transaction.
- July 2012 – Dell management prepares financial projections (the "July Case"), which supported internally produced valuation estimates that were "significantly higher than the company's stock price."<sup>10</sup>
- Dell management advises its board of directors that industry revenue multiples imply an enterprise value of \$40 billion by the end of fiscal year 2012, which is \$25 billion higher than the current enterprise value based on the publicly traded share price.
- Dell management also suggests that the company's diversification to enterprise software and services should increase the enterprise value to \$70 billion.<sup>11</sup>
- August 2012 – Silver Lake approaches Michael Dell and also suggests an MBO transaction. Michael Dell then approaches Kohlberg Kravis Roberts & Co., L.P. ("KKR"), to discuss the viability of an MBO transaction.
- August 14, 2012 – Michael Dell informs Alex Mandl, the lead independent director of Dell, of his discussions with Southeastern, Silver Lake, and KKR.
- August 17, 2012 – The Dell board of directors meet and then inform Michael Dell that they will consider an MBO. Michael Dell then informs Silver Lake and KKR of this, but does not inform Southeastern.
- August 20, 2012 – Dell board of directors forms a special committee. The special committee then hires Debevoise & Plimpton LLP as legal counsel and JPMorgan as financial adviser.
- First Week, September 2012 – The special committee enters into confidentiality agreements with Silver Lake, KKR, and Michael Dell. Mr. Dell's confidentiality agreement prohibited him from pursuing a transaction with any person or entity other than Silver Lake or KKR, unless approved by the special committee.
- September 13, 2012 – Dell management provides the special committee with financial projections, which imply an enterprise value of \$40 billion, or \$25 billion higher than the value based on the current stock price. Dell management states that, if the last 12 months of free cash flow were capitalized into perpetuity, the share price would be higher than \$30 per share.<sup>12</sup>
- The publicly traded share price, as of the same time period, implies that the Dell's free cash flow would decline by 20 percent per year into perpetuity.<sup>13</sup>

The July Case projections are met with skepticism by the special committee, which views them as “very optimistic.”<sup>14</sup>

The special committee instructs the Dell chief financial officer to modify the July Case projections to incorporate a more downward biased forecast for PC sales over the next five years that was published in a market research report by International Data Corporation (“IDC”).

- September 14, 2012 – JPMorgan advises the special committee that “KKR and Silver Lake were among the best qualified potential acquirers” and that there was “a low probability of strategic buyer interest in acquiring the company.”<sup>15</sup>

The special committee then “decided to refrain from contacting other sponsor groups until an offer was received from Michael Dell and either KKR or Silver Lake.”<sup>16</sup>

- September 17, 2012 – The Dell chief financial officer presents revised financial projections to the special committee (the “September Case”) that projects lower revenue and profit margins than the July Case.

The special committee states that the September Case is still “overly optimistic,” but nonetheless authorizes the September Case projections to be presented to the bidders.

- October 9, 2012 – JPMorgan presents valuation ranges to the special committee. The valuation ranges under the DCF valuation method analysis are as follows:<sup>17</sup>
  1. September Case – \$20.00 to \$27.00 per share
  2. Sell-side analyst highest projections – \$19.25 to \$25.75 per share
  3. Sell-side analyst consensus projections – \$15.25 to \$19.25 per share
  4. Sell-side analyst lowest projections – \$9.50 to \$11.50 per share

JPMorgan also provides an analysis of the implied pricing multiple that financial buyers may base on a standard LBO model, which solves for an IRR. At a leverage ratio of 3.1, JPMorgan projects that a financial buyer could pay \$14.13 per share at higher projected pricing multiples.

However, at higher projected multiples, a financial buyer may not achieve an IRR in excess of 20 percent.

Based on IRR projections ranging from 20 percent to 25 percent, JPMorgan finds that a financial buyer could pay between \$11.75 and \$13.00 per share or, with further recapitalizations, \$13.25 to \$14.25 per share.

- October 10, 2012 – Goldman Sachs assists Dell management by preparing financial projections that are presented to the special committee. Goldman Sachs presents an analysis based on an LBO model. Based on the September Case projections, Goldman Sachs projects that a financial buyer could pay \$16.00 per share and still generate a five-year IRR of 20 percent.<sup>18</sup>

At the time that these financial projections were prepared, the Dell common stock had a publicly traded daily closing price of \$9.43 per share.<sup>19</sup>

- October 23, 2012 – Both Silver Lake and KKR submit bids. Silver Lake proposes an all cash transaction valued at \$11.22 to \$12.16 per share. KKR proposes an all cash transaction valued at \$12.00 to \$13.00 per share.

As of October 23, 2012, Dell had a publicly traded stock daily closing price of \$9.35. The special committee considers that the implied transaction premium is comparable to premiums offered by private equity firms for other large deals over the prior five years.

However, the private equity prices of \$11.22 to \$13.00 per share are well below the DCF valuation estimates per share prepared by JPMorgan. Only the JPMorgan and Goldman Sachs “street” low case and LBO model valuations are in close proximity to the private equity offers.<sup>20</sup>

- November 2012 – Special committee member Laura Conigliaro, a partner at Goldman Sachs and former equity research analyst covering the tech sector, states that there is “a potential need for us to consider a very conservative forecast, possibly even one that we once may have viewed as being close to ‘worst case’ in order for us to get ahead of the downward changes that we have been watching.”

The special committee then hires Boston Consulting Group, Inc. (“BCG”), to create independent financial projections for Dell.<sup>21</sup>

- November 15, 2012 – Dell reports its financial results for the third quarter. Revenue and earnings per share were

below the company's guidance and "street" consensus. Revenue and earnings per share declined 11 percent and 28 percent year-over-year, respectively.<sup>22</sup>

- December 3, 2012 – KKR withdraws its bid and drops out of the transaction negotiation. This leaves Silver Lake as the lone bidder, with no pre-signing competition.<sup>23</sup>
- December 4, 2012 – Silver Lake increases its bid to \$12.70 per share. The special committee rejects the bid as inadequate.<sup>24</sup>
- December 5, 2012 – BCG presents to the special committee for the first time, but later provides detailed financial projections. BCG observes that the preliminary valuation estimates do "not match apparent company strengths," but rather reflects "investor concerns."<sup>25</sup>

JPMorgan echoes this view, stating that "limited visibility and missed Street expectations appear to have led to increased investor focus on near-term execution."<sup>26</sup>

Michael Dell concurs with this view, believing that his long-term plans for Dell would be perceived negatively because "they would dramatically reduce near-term profitability."<sup>27</sup>

- December 2012 – The special committee contacts the private equity firm, Texas Pacific Group, to solicit interest. Texas Pacific Group signs a confidentiality agreement, is given access to the data room, and meets with Michael Dell at his home.

On December 23, Texas Pacific Group informs JPMorgan that it would not submit a bid, explaining that the future of the PC market is too unpredictable.<sup>28</sup>

- January 2, 2013 – BCG provides detailed financial projections, which it updates on January 15 to incorporate new projections by IDC. There are three projection scenarios:
  1. The "BCG Base Case," which is more pessimistic than the September Case, but in line with recent sell-side analyst reports
  2. The "BCG 25% Case," which assumes that Dell would be able to achieve 25 percent of its planned \$3.3 billion cost-saving initiative
  3. The "BCG 75% Case," which assumes that Dell would be able to achieve 75 percent of its planned \$3.3 billion cost-saving initiative

For each case, it uses the same revenue projections. BCG notes that its BCG 75% Case would realize higher margins than the company or its competitors had ever achieved.<sup>29</sup>

- January 7, 2013 – The special committee retains Evercore Partners ("Evercore") as a second financial adviser in addition to JPMorgan. Evercore presents a preliminary DCF valuation estimate of \$14.27 to \$18.40 per share, and an LBO model valuation estimate of \$14.27 to \$18.40 per share.<sup>30</sup>
- January 15, 2013 – Silver Lake increases its bid to \$12.90 per share. JPMorgan analyzes the proposal and finds that it is near the midpoint of values generated by trading multiples based on LBO model estimates. The bid price per share is also near the DCF method price based on the low case and the most conservative BCG case.

However, the Silver Lake bid price is below the value generated by the DCF market consensus case, the BCG 25% Case, BCG 75% Case, and the September Case.

Evercore reaches a similar conclusion, and calculates that if Dell performed according to the September Case, Silver Lake would achieve a five-year IRR of 45 percent. Evercore also calculates that if Dell achieved financial results in between the BCG 25% Case and BCG 75% Case, Silver Lake would achieve a five-year IRR of 39.8 percent based on consideration of \$12.90 per share.<sup>31</sup>

- January 18, 2013 – The special committee recommends a sale price of \$13.75 per share. Shortly thereafter, Michael Dell offers to roll his shares over at a lower valuation to further entice Silver Lake, which increases its bid to either (1) \$13.60 per share or (2) \$13.75 per share if Dell ceased paying dividends.

The special committee again resists, and Silver Lake increases its bid to \$13.65 (with continuance of dividends).<sup>32</sup>

- February 5, 2013 – JPMorgan and Evercore conclude that the Silver Lake offer is fair. The cash offer for \$13.65 per share is supported by the low end of the DCF method valuation using the BCG 25% Case, which provides a range of \$12.00 to \$16.50 per share. It is also comparable to the BCG Base Case, which provides a range of \$10.50 to \$14.25 per share.



Evercore estimates at that \$13.65 transaction price and an exit pricing multiple of 4.0x earnings before interest, taxes, depreciation, and amortization (“EBITDA”), Silver Lake would achieve a 4.5-year IRR of 23.3 percent.

The special committee recommends to the board of directors that it accept the offer, which it does on February 6, 2013. The merger agreement provides for a 45-day go-shop period and a \$180 million termination fee. Evercore commences the go-shop period.

Within 10 days, Evercore reaches out to 60 entities. Hewlett Packard expresses no interest.<sup>33</sup>

- March 5, 2013 – Carl Icahn and Icahn Enterprises L.P. (collectively, “Icahn”) send a letter to the Dell board of directors expressing opposition to the merger, and propose a leveraged recapitalization that would involve paying a special dividend of \$9 per share. Evercore invites Icahn to conduct due diligence.<sup>34</sup>
- March 22, 2013 – Icahn submits a new proposal whereby shareholders would roll over their shares into a new entity on a one-to-one basis or receive \$15.00 per share in cash, subject to a cap of \$15.6 billion in total cash payments.

Evercore values this proposal at \$13.37 to \$14.42 per share. Blackstone also submits a similar proposal, which Evercore values at \$14.25 per share.<sup>35</sup>

- March 23, 2013 – The go-shop period ends. Blackstone and Icahn request fee reimbursement for their time spent on due diligence, which the special committee agrees to for Blackstone, but not Icahn.

Michael Dell informs Blackstone that he is receptive to their offer, until rumors are reported on Reuters that Blackstone is vetting alternative chief executive officer candidates to replace Michael Dell. This rumor is allegedly met with contempt by Michael Dell.<sup>36</sup>

- April 18, 2013 – Blackstone withdraws its bid. Blackstone had never been given the BCG projections.<sup>37</sup>
- May 2013 – The Dell board of directors set a special meeting to vote on the merger for July 18, 2013.
- May 31, 2013 – The Dell board of directors disclose in the company proxy statement, that the “committee did not seek to determine a pre-merger going-concern value for



the common stock to determine the fairness of the merger consideration.”

The proxy statement states that the special committee recommends the transaction because (1) it is a cash transaction, (2) it is a 37 percent premium over the 90-day average stock price, and (3) there is a declining “street” consensus for earnings per share forecasts.<sup>38</sup>

- July 31, 2013 – After the special committee learned earlier in the month that the merger proposal likely would not receive majority support at the shareholder vote, Evercore increases its offer by \$0.10, to \$13.75 per share, plus a special cash dividend of \$0.13 per share.

To finance the increased price, Michael Dell also agrees to roll over his shares at \$12.51 per share.<sup>39</sup>

- August 2013 – Dell management and Evercore make a presentation to rating agencies regarding post-acquisition debt to finance the transaction. They use financial projections that are more optimistic than analyst projections or the IDC report and project long-term growth of 2 to 3 percent.

Dell management tell rating agencies that Dell is “well on its way” to achieving \$1.3 billion out of the targeted \$3.5 billion in cost savings (previously \$3.3 billion), and they are “very confident” that Dell will realize the remaining cost savings.

The case that Silver Lake presents to the banks that would finance the merger (the “Bank Case”) assumes \$3.6 billion in cost savings (equal to 109 percent of the original cost savings estimate for the BCG scenarios, higher than the highest scenario,

which was 75 percent of cost savings, the BCG 75% Case).<sup>40</sup>

- September 12, 2013 – The merger is approved by 57 percent of shareholders (70 percent of those who voted).

## OBSERVATIONS ON THE COMPANY SALE PROCESS

### Eroding Market Share and Competition from Substitute Products

From 1997 through 2004, Dell consistently gained market share. The disruption to the Dell market began around 2005, well before the sales process commenced.

When Michael Dell rejoined the company as chief executive officer in 2007, Dell had lost its lead in the PC market the prior year to Hewlett-Packard. In addition, Dell had been the subject of an investigation by the SEC for possible accounting improprieties. Several executives had left the company during 2007, including the chief financial officer.

Dell had attempted to expand into offering flat-panel TVs and MP3 players, to little avail. Dell was also too slow to adopt AMD processors. Another issue was that to maintain its low prices and sustain profit margins, Dell shifted customer service to India and its customers complained about the poor service. The price erosion for PCs seemed to be a vicious cycle with no end in sight.

As of 2007, consumers accounted for only 15 percent of Dell revenue, and it was difficult to increase that proportion because it still sold directly over the Internet or by phone. This constraint posed a problem for selling flat-screen TVs. The company lacked the necessary distribution channels to more effectively reach individual consumers.<sup>41</sup>

Negotiating terms during the sale process is obviously difficult when the target continually reports disappointing quarterly financial results and the industry in which it participates is affected by eroding market share due to substitute products or services. This condition makes the preparation of financial projections more challenging, as evidenced by the diverging financial forecasts by Dell management and financial advisers.

A year and a half prior to the sale process, Dell management had conducted a sum-of-the-parts valuation for internal use, which provided estimated

company value of \$22.49 to \$27.05 per share. By the time the sale process was underway, the financial forecasts on which that valuation range was based were stale.

Projecting financial results for a company involved in a Dell-type turnaround situation is challenging—not just because of the nebulous outlook for its core PC business, but because its revenue diversification plans were in their infancy. Michael Dell was understandably frustrated by the valuation gap vis-à-vis Dell management's estimate of intrinsic value.

It is rather common for a company to implement a Dell-type turnaround situation, and the Chancery Court addressed this issue. One example is when Starbucks Corporation ("Starbucks") began to implement a strategy during 2008 to reduce cannibalization of its stores by closing stores and reducing its capital expenditures.

The Starbucks strategy and its financial forecasts were widely publicized to the investment community, but were panned by many as "addition through subtraction" and fraught with execution risk, despite the obvious increase in free cash flow that would result. The Starbucks plan was to increase the return on capital for each store by driving traffic from nearby stores that were to be shuttered.

Nonetheless, the Starbucks stock price began 2008 at \$9.65, sputtered through the first three quarters of the year, and ended the year at \$4.73. Those who bought the stock may have been pleased with its closing price on December 31, 2010, of \$16.07, and closing price on December 30, 2011, of \$23.01.

### Transaction Timing

Regarding the lack of bidders, one may wonder—why did Dell have to be sold at this particular time? Based on the facts presented at trial, it appeared that Michael Dell was frustrated by the valuation gap for several years, and was inspired to explore an MBO only upon being approached by Southeastern. He properly formed the special committee, and he appears to have not committed breaches of fiduciary duty.

The sale process, however, involved only two serious bidders before the go-shop period—Silver Lake and KKR. JPMorgan stated that Dell was not likely to receive any offers from strategic bidders (such as a competing company). The lack of bidders, particularly from strategic acquirers, raises the question if this was the right time to sell.

## Dell Transaction Pricing Reliance on the LBO Model

During the sale process, the Dell advisers used an LBO model—along with the income approach and market approach—to estimate the company value. The two main flaws with the LBO model in the context of the Dell valuation are that (1) LBO models do not provide an estimate of value, the LBO models are used to solve for the IRR based on an assumed transaction multiple, and (2) LBO models require an assumption of an exit date, usually five years.

In the instant case, financial projections for the planned company turnaround will take more than five years to implement and will omit growth beyond the fifth year because the private equity firm expects to sell the company in the fifth year.

The DCF method analyses include a variable discrete period and a terminal period value that is capitalized in perpetuity. A DCF method may project 10 years of financial results and, as an example, project that only after 5 years would stability and a resumption of growth occur.

The DCF method valuation would, therefore, capture financial results after the first five years of projections. An LBO model based on a projected 5-year exit (when the private equity firm liquidates its position either through a sale of its interest to another entity or through an initial public offering) would not include financial projections for years 6 through 10.

The LBO model provides the means to essentially back solve to find the EBITDA pricing multiple a private equity firm would be willing to pay based on its targeted IRR. This “back solve” calculation is a very easy calculation using the Excel “goal seek” function to solve for the IRR by changing the purchase or sale price multiples in an integrated financial model.

### Explanation of the LBO Model

LBO models can be used to solve for the IRR based on a valuation; they do not solve for value. The IRR is a commonly used financial metric by private equity firms to analyze and assess the merits of making a new investment.

The calculation of an IRR involves a beginning point—when capital is initially deployed in an investment—and an ending point—when an investment is liquidated. The IRR is similar to a compound annual growth rate (“CAGR”) in that it is expressed as a percentage and represents an average annual growth rate over the course of some defined timespan.

The primary difference between the IRR and the CAGR is that the CAGR calculation is based on only a beginning and ending value, whereas the IRR also captures interim period cash flow in its discrete IRR figure.

Most, but not all, private equity firms use leverage to acquire a company. The use of leverage magnifies the equity returns, which are expressed as an IRR. The debt financing obtained by a private equity firm becomes a liability of the target and is recorded on the target’s balance sheet. The private equity firm then gradually pays down the target company debt, over the course of several years, using the target company cash flow.

According to a survey of 79 private equity firms published by Harvard Business School, the average targeted IRR of private equity firms is 22 percent, and the average realized IRR of private equity firms is 2.7 percent above the targeted IRR, or a 24.7 percent realized IRR.<sup>42</sup>

As of 2015, the average length of time that private equity firms hold an investment before exiting was 5.5 years.<sup>43</sup>

### Dell Final Consideration—LBO Model IRR Suggests DCF Method Took a Back Seat

Since the only two bidders during the pre-signing phase were private equity firms, the Dell financial advisers prepared a range of estimated valuations that included an LBO model analysis, in addition to the DCF method and the guideline publicly traded company method.

For merger and acquisition (“M&A”) negotiations, if private equity firms are among the bidders, target company financial advisers typically construct an LBO model for the purpose of estimating the highest price the private equity firm may be willing to pay. Hence, the LBO model is a negotiating tool rather than a method to estimate fair value.

Although there is nothing wrong with using an LBO model for the sake of negotiations, it appeared that there was too much focus on the LBO model analysis during the sale process. It appears this way because the final transaction consideration was more similar to the LBO model results than the valuation ranges by other methods.

The cash offer of \$13.65 per share was at the low end of JPMorgan’s final DCF valuation using the BCG 25% Case, which provided a range of \$12.00 to \$16.50 per share.<sup>44</sup>

All of the BCG financial projection scenarios assumed the same revenue each year in the projection, and there was no explanation in the Opinion as to why an optimistic scenario would have the same

revenue as a pessimistic scenario. Before terms were accepted in principal, Evercore updated its LBO model.

Based on the consideration offered and financial projections under the BCG 25% Case, Silver Lake would realize a 4.5-year IRR of 23.3 percent at an exit pricing multiple of 4.0x EBITDA in 4.5 years and 30.2 percent at an exit pricing multiple of 5.0x EBITDA in 4.5 years.<sup>45</sup>

There are a few problems with how these figures line up. According to studies previously cited, the average exit period is 5.5 years, not 4.5 years. The problem with using a 4.5-year IRR is that it does not capture the financial results for a turnaround company after 4.5 years.

Furthermore, much the same as why a fixed income security will pay a lower interest rate the lower its duration, due to less risk of the length of the holding period, a private equity firm would likely accept a lower IRR if its expected holding period is one year less than average. This point was not addressed in the Opinion.

Also, according to studies previously cited, the average targeted IRR is 22 percent, which agrees with an exit pricing multiple of 4.0x EBITDA according to the Evercore LBO model. An exit multiple of 4.0x EBITDA does appear to be a bit low for a reputable, large company that is profitable despite its industry challenges.

For the sake of argument, let's assume that a 4.0x exit pricing multiple is reasonable. The IRR would then be within range of the average targeted IRR if based on the BCG 25% Case.

## Silver Lake Presents Projections to Its Lenders—Consistent with BCG 25% Case

The Opinion discussed the three BCG projection scenarios prepared during the sale process:<sup>46</sup>

1. The BCG Base Case (assuming the planned streamlining is a complete failure and achieves zero cost savings)
2. The BCG 25% Case (achieving 25 percent of planned cost savings of \$3.3 billion, recurring annually, beginning in 2016)
3. The BCG 75% Case (achieving 75 percent of planned cost savings of \$3.3 billion, recurring annually, beginning in 2016); fiscal year 2016 was the third year of the projection period

In September 2013, which was the month the shareholders approved the MBO deal, Dell manage-

ment told rating agencies that it was “well on its way” to achieving \$1.3 billion out of the targeted \$3.5 billion in cost savings (previously \$3.3 billion), representing 37 percent of targeted annual cost savings, higher than the BCG 25% Case.

Dell management was “very confident” that Dell would realize the remaining cost savings, which would have been even higher than the cost savings achieved under the BCG 75% Case.

This is not to say that Silver Lake was projecting higher earnings before interest and taxes (“EBIT”) than any of the BCG scenarios.

Comparing the EBIT forecasts under the Bank Case on page 39 of the Opinion to the EBIT forecasts under the three BCG scenarios on page 20, it is apparent that the Bank Case projects EBIT that is less than the BCG 25% Case for the first three years of the projection period, but in the fourth year exceeds the BCG 25% Case by \$80 million (the difference being only 2 percent of total EBIT).

Therefore, the Bank Case provided a lower EBIT and EBIT margin than the BCG Base Case, but added the full amount of projected cost savings—higher than the BCG 75% Case. The net effect on the Bank Case EBIT projection, by 2017, was roughly the same as the BCG 25% Case EBIT projection.

## DELAWARE CHANCERY COURT OPINION—MAY 31, 2016

The Chancery Court concluded that the fair value of Dell common stock at the effective time of the merger was \$17.62 per share, which was 27 percent higher than the total consideration.

The trial lasted four days and the trier of fact heard from seven fact witnesses and five expert witnesses, including two who served as independent valuation analysts.

The legal analysis section of the Opinion began by explaining (1) the statutory appraisal mandate, (2) the final merger consideration is a relevant factor but not the only factor in determining fair value, (3) the court found no breach of fiduciary duty, and (4) the deal price for an MBO, depending on the facts and circumstances, may be scrutinized more than for a true arm's-length transaction.<sup>47</sup>

The Opinion then provided a discussion of its analyses and opinions that pertained to fair value as follows:

1. The LBO pricing model<sup>48</sup>
2. The valuation gap (difference between publicly traded price and intrinsic value)<sup>49</sup>
3. Limited pre-signing competition<sup>50</sup>



4. The post-signing go-shop phase<sup>51</sup>
5. The analysis and fair value estimates by the two valuation analysts for the petitioners and for the respondents<sup>52</sup>

## The LBO Pricing Model

The Chancery Court observed and took issue with certain aforementioned flaws of the LBO pricing model, such as the fact that it does not provide an estimate of fair value. However, the Opinion did not address that the LBO model projections are confined to the expected holding period.

As discussed previously, a turnaround situation may last more than 4.5 years. The Opinion also did not discuss why there were diverging results for the DCF method versus the LBO model, except to observe that the amount of leverage is a key variable for the IRR calculated through an LBO model.

The Chancery Court took issue with (1) the diverging values, (2) the deposition of the Dell chief financial officer that Silver Lake was “not concerned at all . . . with the intrinsic value analysis of the business,”<sup>53</sup> and (3) the fact that the special committee did not focus on fair value, even disclosing in its proxy statement that the “Committee did not seek to determine a pre-merger going concern value for the Common Stock to determine the fairness of the merger consideration to the Company’s unaffiliated stockholders.”<sup>54</sup>

The Chancery Court observed that one of the two Dell financial advisers, JPMorgan, performed both a DCF and an LBO analysis, and the diverging results demonstrated that a private equity firm “would not be willing to pay an amount approaching the company’s going-concern value.”<sup>55</sup>

JPMorgan concluded that an MBO was not feasible at prices of \$19 or higher because the targeted IRR would require an amount of leverage that would not have been possible to obtain.<sup>56</sup>

## The Valuation Gap

The Opinion offered two particularly compelling observations when discussing that there may have been a significant gap between the Dell publicly traded stock price and intrinsic value per share—Dell management performed a sum-of-the-parts analysis that valued the company at \$22.49 to \$27.05 per share, when its stock traded at around \$14 per share.

Although this was performed a year and a half before the sale process began, it appears that the Chancery Court considered that the valuation gap at that time may have persisted during the sale process.



To support this assertion, it was observed that when Dell’s stock traded between \$9 and \$10 per share during October 2012, JPMorgan employed several valuation methods that exceeded those prices, and its initial DCF method resulted in a valuation range of \$20 to \$27 per share. It was later recognized, however, that the financial projections used at the time to arrive at that valuation range were dated and optimistic.

A Dell company equity analyst report prepared by Goldman Sachs was mentioned. This report cited a series of reasons for the valuation gap, including that “companies at the center of industries undergoing major structural changes often suffer from depressed valuation that seem ‘disconnected’ from fundamentals.”<sup>57</sup>

The Opinion cited a short article by M&A attorney Martin Lipton, senior partner at Wachtel, Lipton, Rosen & Katz, published by the Columbia Law School blog. That article provides a discussion of a study that presents “substantial empirical evidence” that short-term investors can pressure companies to maximize near-term gains at the expense of long-term growth.<sup>58</sup>

The Opinion footnotes this article in writing that “investors focused on short-term, quarterly results can excessively discount the value of long-term investments.” Apparently, the court considered that the Dell product diversification turnaround plan was not being given credit by the financial markets.

The Opinion did not delve into empirical anecdotes. It is worth noting that the technology sector, in particular, can be afflicted by momentum-chasing institutional investors who can overly reward companies with high growth expectations, while overly penalizing those afflicted by setbacks. The technology sector is unique from a lot of other sectors in that buyer preferences can change rapidly.

Sometimes a new, popular product can spawn an entire new market for peripherals. gyrations in stock prices for publicly traded technology companies reflect how difficult it is for companies to maintain their competitive edge and market share.

## Limited Pre-Signing Competition

The Chancery Court found that the lack of price competition during the pre-signing phase undermined the persuasiveness of the merger consideration as evidence of fair value. The special committee initially engaged only two private equity bidders. And, the special committee financial advisers did not contact any potential strategic acquirers.

KKR dropped out after initially expressing interest. A third private equity firm was invited to the due diligence process—Texas Pacific Group—who also dropped out after a short period of time.

Evercore considered that Hewlett Packard could be a potential acquirer, but the company was not contacted.

Numerous academic papers were cited to support the credence that the go-shop period following the pre-signing phase rarely results in topping bids. In general, the most transaction price competition occurs before the deal is accepted in principle.<sup>59</sup>

One footnote in the Opinion cited a quote by M&A attorney Martin Lipton during an interview of Mr. Lipton by one of the expert witnesses in this matter, Professor Guhan Subramanian: “The ability to bring somebody into a situation [pre-signing phase] is far more important than the extra dollar a share at the back end [go-shop phase]. At the front end, you’re probably talking about 50%. At the back end, you’re talking about 1 or 2 percent.”<sup>60</sup>

## The Post-Signing, Go-Shop Phase

During the 45-day go-shop period, after terms had been accepted in principle with Silver Lake, Dell financial adviser Evercore reached out to 60 entities. Hewlett Packard, which had been considered but not contacted during the pre-signing phase, expressed no interest.

Two new bidders emerged—Icahn and Blackstone. Icahn initially proposed a leveraged recapitalization that would involve paying a special dividend. Icahn’s bid was valued by Evercore at \$13.37 to \$14.42 per share, and Blackstone’s bid was valued at \$14.25 per share.

Blackstone ultimately dropped out after rumors circulated that Blackstone was interviewing replacement candidates for chief executive officer. Dell rejected the Icahn bid.

The Chancery Court accepted, in part, the respondents’ argument that if Dell were worth significantly more than the Silver Lake offer, then surely another bidder would offer much more. The court found that if the intrinsic value were, say, \$28.61 as the petitioner’s argued, Dell would have received other offers from other bidders.

However, the court found that due to the limited pre-signing competition, a smaller valuation gap could have existed.<sup>61</sup>

The Chancery Court also found that the acceptance of the deal price by a majority of shareholders does not equate to fair value. This is because of the possibility that some institutional shareholders may have been happy to take a premium over the trading price for the sake of booking quarterly gains to improve their returns.<sup>62</sup>

In the Opinion, the Chancery Court seemed to place a lot of credence in the testimony of expert witness Professor Guhan Subramanian who testified as to the shortfalls of go-shop periods.

The Chancery Court observed that the terms of the go-shop period were flexible, such as the requirements for status of a bidder to be an “excluded party,” which is the right for a new bidder to continue negotiations beyond the 45-day period (in this case, it was four months).

Subramanian testified that while he found no structural impediments in the go-shop terms, the Dell merger was 25 times larger than any transaction in his sample of “jumped deals” (a higher bidder emerges and wins).<sup>63</sup>

The size and complexity of Dell meant that even an extended go-shop period may not have been enough time to adequately determine a fair merger price.

## Valuation Analysts for the Petitioners and the Respondents

The valuation analyst for the petitioners was Professor Bradford Cornell of the California Institute of Technology. Cornell’s estimated fair value using the DCF method was \$28.61 per share.

The valuation analyst for the respondents was Professor Glenn Hubbard of the Columbia Business School. Hubbard’s estimated fair value using the DCF method was \$12.68 per share.

The Opinion discussed broadly why these two fair value estimates were so far apart, and observed that the major difference was in the projected cash flow used in the DCF methods.

## Projections

Cornell, the petitioner’s analyst who arrived at the higher fair value estimate, first calculated an

average of the BCG 25% Case and the BCG 75% Case. Then, Cornell gave equal weight to the BCG average and the Bank Case.<sup>64</sup>

Hubbard, the respondent's analyst who arrived at the lower fair value, used an adjusted version of the BCG 25% Case. Hubbard's adjustments were premised on a report by IDC in August 2013 that PC shipments were weaker than anticipated. Hubbard adjusted revenue projections under the BCG 25% Case to reflect this, but maintained profit margin projections despite the downward adjustments to revenue.

Hubbard also adjusted for stock-based compensation expense, which Cornell agreed with as well. Finally, Hubbard extended the projection period by five years to better capture the Dell transition plan.<sup>65</sup>

The Chancery Court cited a prior court ruling—*Highfields Capital, Ltd. v. AXA Financial, Inc.*<sup>66</sup>—as a precedent matter. In *Highfields*, the court found that a valuation analyst's adjustments to management projections may be considered if proven defensible, but are viewed with caution.

The Chancery Court determined that the most credible set of projections were Hubbard's adjusted BCG 25% Case, which "was likely somewhat conservative,"<sup>67</sup> and an adjusted version of the Bank Case. Hubbard apparently did not use the Bank Case initially, but later calculated an adjusted Bank Case that adjusted for nonrecurring restructuring expenses and stock-based compensation.

## Perpetuity (Long-Term) Growth Rate for the DCF Terminal Period

Cornell, the petitioner's analyst, used a perpetuity growth rate of 1 percent, and Hubbard, the respondent's analyst, used a perpetuity growth rate of 2 percent.

The Chancery Court noted that it has held before that the "rate of inflation is the floor for a terminal value estimate for a solidly profitable company that does not have an identifiable risk of insolvency."<sup>68</sup>

This is also a widely held belief among the community of valuation analysts. Since the weighted average cost of capital ("WACC") used in a DCF valuation includes a risk-free rate, unless the company is expected to have declining growth indefinitely until it is insolvent, it would be erroneous to not include it in the long-term growth rate used to capitalize the terminal period.

According to one author, the "discount rate incorporates the expected rate of inflation as part of the required rate of return. Since the nominal government bond interest rates used in developing



these discount rates incorporate expected inflation over the duration of the bond, the implication is that the selected long-term growth rate should also reflect the impact of expected inflation on the economic income variable being capitalized."<sup>69</sup>

The Chancery Court decided that while a 3 percent perpetuity growth rate may be more appropriate, it used a 2 percent rate.<sup>70</sup>

This 2 percent rate departed slightly from the projected inflation rate published by the Federal Reserve Bank of Philadelphia's Livingston Survey. On December 12, 2012, the Livingston Survey projected 10-year annual real gross domestic product growth of 2.5 percent, and a 10-year consumer price index ("CPI") based inflation of 2.5 percent.<sup>71</sup>

The Opinion did not cite a discrete CPI-based inflation rate projected at the time.

## Tax-Affecting Cash Flow Projections<sup>72</sup>

Cornell, the petitioner's analyst, applied a 21 percent income tax rate throughout the projection period. The 21 percent income tax rate was provided by the September Case and the valuation models prepared by the Dell financial advisers.

Hubbard, the respondent's analyst, used two different income tax rates—17.8 percent for the projection period and 35.8 percent for the terminal period. Hubbard cited academic literature to support his use of the 35.8 percent income tax rate and his conclusion that Dell would likely repatriate its capital held overseas (on which Dell would have to pay income taxes).

Further, to apply the top income tax rate to the terminal period implied that Dell would perpetually pay that income tax rate.

The Chancery Court found Hubbard's approach to be speculative, and the court observed that Dell had not paid income taxes at the marginal rate



since at least 2000. The Chancery Court accepted Cornell's income tax estimate.

### Weighted Average Cost of Capital (The Discount Rate)<sup>73</sup>

The two analysts disagreed on every input to the WACC except for the risk-free rate. The Chancery Court ruled that the cost of debt should have been based on the Dell BBB credit rating by Standard & Poor's as of the valuation date, which equated to a 4.95 percent cost of debt.

The two analysts used very similar capital structures to weight the cost of debt and equity in the WACC, and the Chancery Court selected the middle ground at 75 percent. For the selected beta, Cornell, the petitioner's analyst, derived a beta of 1.31 using weekly betas of guideline publicly traded companies over a two-year period.

The Chancery Court decided that the use of the Dell beta was more appropriate, and used Hubbard's beta, but did not enumerate the beta. For the equity risk premium, Cornell used a forward-looking equity risk premium of 5.50 percent, while Hubbard used a blended historical and supply-side equity risk premium of 6.41 percent.

The Chancery Court selected the supply-side equity risk premium of 6.11 percent, and cited two court cases supporting its decision.

### Adjustments for Balance Sheet Cash<sup>74</sup>

Lastly, the Chancery Court addressed the amount of excess cash that should be added to the valuation. Cornell, the petitioner's analyst, added back the entire amount of net cash, or \$6.158 billion.

Hubbard, the respondent's analyst, made four deductions to net cash—\$3 billion for working capital needs, \$2 billion for restricted cash, \$2.24 billion for deferred taxes, and \$3 billion for contingent taxes.

The Chancery Court accepted Hubbard's deduction for working capital needs, noting that Silver Lake had left \$5.665 billion in cash on the balance sheet after closing. The court partly accepted Hubbard's deduction for restricted cash, reducing that amount to \$1.2 billion based on the Dell presentation to the rating agencies when they disclosed that they had obtained access to \$0.8 billion in restricted cash before the merger closed.

With regard to deferred taxes, the Chancery Court had already concluded that Hubbard's opinion—that is, that Dell would eventually repatriate its cash held overseas—was speculative. Accordingly, the Chancery Court rejected this deduction from excess cash.

Lastly, the court ruled on the deduction for contingent income taxes. Under FASB Interpretation No. 48, a company should maintain a reserve on its balance sheet for the amount it may have to pay should its position on prior tax positions be disputed and proved incorrect. Hubbard deducted the entire amount and the Chancery Court disagreed on the premise that Dell management is better equipped to estimate its tax liability than the Chancery Court.

Although the court did not use the word "speculative" in this context, it appears that to deduct the entire amount would be speculative. The court cited that the Bank Case did deduct \$650 million to account for contingent tax liabilities, which the court accepted as a deduction from excess cash.

### The Chancery Court Ruling

The Chancery Court determined a fair value of \$17.62, which was 27 percent higher than the merger price. The Chancery Court based its decision on the aforementioned inputs to the DCF method, as well as on the application of both (1) Hubbard's DCF method using the adjusted BCG 25% Case and (2) Hubbard's DCF analysis using the adjusted Bank Case.

The former valuation method produced a fair value estimate of \$16.43 per share, and the latter produced a fair value estimate of \$18.81 per share.

### COURT CASES CITED IN THE OPINION

The following are some of the judicial precedent cited in the Opinion, and the context in which they were cited:

- In Delaware dissenting shareholder appraisal rights actions, the deal price may be the most reliable indicator of fair value when other evidence is weak – *Merion Capital LP and Merion Capital II LP v. BMC Software, Inc.*, No. 8900-VCG, 2015 WL 616477 (Del. Ch. Oct. 21, 2015); *Highfields Capital, Inc. v. AXA Fin., Inc.*, 939 A.2d 34 (Del. Ch. 2007)<sup>75</sup>
- In Delaware dissenting shareholder appraisal rights actions, merger consideration is not the sole element that should be considered; publicly traded market prices should be considered, but are not dispositive – *Cede & Co. v. Technicolor, Inc.*, No. 7129, 1990 WL 161084 (Del. Ch. Oct. 19, 1990); *Gonsalves v. Straight Arrow Publ'rs, Inc.*, 793 A.2d 312 (Del. 1998); *Rapid-Am. Corp. v. Harris*, 603 A.2d 796 (Del. 1992)



- The Chancery Court is required to take into account all relevant factors to determine going concern value – *Golden Telecom, Inc. v. Glob. GT LP*, 11 A.3d 214 (Del. 2010)
- The sale process may fall within the Revlon range of reasonableness, but may generate a price not equivalent to fair value – *In re Appraisal of Ancestry.com, Inc.*, No. 8173-VCG, 2015 WL 399726 (Del. Ch. Jan. 30, 2015); *M.P.M. Enters., Inc. v. Gilbert*, 731 A.2d 790 (Del. 1999); *In re Orchard Enters., Inc. S'holder Litig.*, 88 A.3d 1 (Del. Ch. 2014)
- There should be evidence that the merger price represents the going concern value of the company, rather than just the value to one specific buyer; the highest price a bidder is willing to pay is not the same as fair value – *M.P.M. Enters., Inc. v. Gilbert*; *In re Orchard Enters., Inc. S'holder Litig.*
- In a statutory appraisal, both sides have the burden of proof – *M.G. Bancorporation, Inc. v. Le Beau*, 737 A.2d 513 (Del. 1999); *Pinson v. Campbell-Taggart, Inc.*, No. 7499, 1989 WL 17438 (Del. Ch. Feb. 28, 1989)
- Fair value under Delaware law is not equivalent to fair market value; fair value “for purposes of Delaware’s appraisal statute is largely a judge-made creation, freighted with policy considerations”<sup>76</sup> – *Finkelstein v. Liberty Digital, Inc.*, No. 19598, 2005 WL 1074364 (Del. Ch. April 25, 2005)
- Under the appraisal rights statute, stockholders are entitled to be paid for their proportionate interest in a going concern – *Tri-Continental Corp. v. Battye*, 74 A.2d 71 (Del. 1950)
- The valuation date is the date on which the merger closes – *Cede & Co. v. Technicolor, Inc. (Technicolor II)*, 684 A.2d 289 (Del. 1996)
- Publicly traded stock prices can still be incorrect at any point in time, for the purposes of determining fair value – *Dollar Thrifty*, 14 A.3d 573 (Del. Ch. 2010) (citing Michael L. Wachter, “Takeover Defenses When Financial Markets are (Only) Relatively Efficient, 161 U. Pa. L. Rev. (2003))
- Fair value should exclude synergies – *BMC*, 2015 WL 6164771
- In an MBO, management has a conflicting role as a buyer, and MBOs present different concerns than true arm’s-length transactions – *Mills Acq. Co. v. McMillan, Inc.*, 559 A.2d 1261 (Del. 1989); *Revlon, Inc. v. MacAndrews & Forbes Hldgs., Inc.*, 506 A.2d 713 (Del. 1986); *In re RJR Nabisco, Inc. S’holders Litig.*, No. 10389, 1989 WL 7036 (Del. Ch. Jan. 31, 1989); *In re Fort Howard Corp. S’holders Litig.*, No. 9991, 1988 WL 83147 (Del. Ch. Aug. 8, 1988); *In re Lear Corp. S’holder Litig.*, 926 A.2d 94 (Del. Ch. 2007); *In re Topps Co. S’holders Litig.*, 926 A.2d 58 (Del. Ch. 2007)
- The highest price a bidder is willing to pay is not necessarily equivalent to fair value – *Appraisal of Orchard*, 2012 WL 2923305
- If a merger or acquisition was timed to take advantage of a depressed market or a low point in the company’s cyclical earnings, the appraised value may be adjusted accordingly – *Glassman v. Unocal Exploration Corp.*, 777 A.2d 242 (Del. 2001)
- When a target company has expansion plans in place, the value of those plans must be considered in determining fair value – *MRI Radiology Assocs., P.A. v. Kessler*, 898 A.2d 290 (Del. Ch. 2006)
- There is anecdotal evidence that private equity firms do not always engage in competitive bidding – *In re Lear Corp. S’holder Litig.* The opinion for *Appraisal of Dell* included a footnote stating that “consistent with the professional culture of not topping other firms’ deals, Silver Lake, KKR, Blackstone, and TPG were among the sponsors who settled a lawsuit alleging they and other private equity firms conspired to fix prices in LBOs.”<sup>77</sup>
- Just because a majority of unaffiliated shares vote in favor of a transaction does not mean the transaction price was at fair value; certain institutional investors may be happy to take a gain for quarterly reporting purposes or to offset other losses – *Glob. GT LP v. Golden Telecom, Inc.*, 993 A.2d 497 (Del. Ch. 2010)
- The Chancery Court has preferred valuations based on contemporaneously prepared management projections – *Doft & Co. v. Travelocity.com*, No. 19734, 2004 WL 1152338 (Del. Ch. May 20, 2004)
- The Chancery Court is skeptical of litigation-driven adjustments to management projections – *Cede & Co. v. JRC Acq. Corp.*, No. 18648-NC, 2004 WL 286963 (Del. Ch. Feb. 10, 2004)
- The Chancery Court may adopt reasonable adjustments to management projections –

*Highfields Capital, Ltd. v. AXA Fin., Inc.*

- The rate of inflation should be the floor for a terminal value estimate for a solidly profitable company that does not have an identifiable risk of insolvency – *Glob. GT LP v. Golden Telecom, Inc.*
- In determining fair value, any speculative future tax liabilities should be excluded, such as speculating that there will be taxes paid in some given year on the repatriation of funds held outside the U.S. – *Paskill Corp. v. Alcoma Corp.*, 747 A.2d 549 (Del. 2000)

## SUMMARY AND FINAL COMMENTARY

By seeming to rely more on the LBO model based on the valuation ranges compared to the final consideration, the financial advisers to Dell were essentially confined to negotiating the best price that a private equity firm would be willing to pay, based on financial forecasts that extended only as far as the IRR's targeted exit year. This is similar to concluding that since Silver Lake and KKR (and later, Icahn and Blackstone during the go-shop period) were the only bidders, then Dell surely must only be worth *at this time* what these small number of bidders were willing to pay.

The thinking was not—since these were the only two bidders in the pre-signing phase and there is no interest from strategic buyers—perhaps this is not the right time to sell the company.

In addition to taking exception to the Dell financial advisers' overreliance on the LBO model, evidenced by the merger price being at the low end of the DCF method valuation ranges, the Chancery Court discussed the likelihood that there was a valuation gap, meaning that the publicly traded stock price was discrepant from intrinsic value. What makes this interesting is that the Chancery Court essentially ruled that both the merger price and the publicly traded stock price were not necessarily equivalent to fair value.

The Delaware appraisal rights statute does indeed give the triers of fact latitude to determine their own best estimate of fair value, and the statute may very well have presciently been intended for circumstances such as *Appraisal of Dell*.

The *Appraisal of Dell* illustrates the Chancery Court's preference for the most contemporaneous set of financial projections. The two set of projections viewed as most credible by the Chancery Court were the Bank Case, which was then adjusted for nonrecurring restructuring expenses and stock-based compensation, and the BCG 25% Case, which

Hubbard adjusted for recently released IDC data and extended the forecast period.

The Chancery Court viewed the adjusted Bank Case as slightly optimistic and the adjusted BCG 25% Case as slightly conservative. A significant difference between the two valuation expert witnesses was the tax rate applied to projected cash flow. The respondent's analyst projected that Dell would eventually repatriate cash held overseas and incur the top marginal tax rate in perpetuity.

The Chancery Court viewed this as both speculative and erroneous to apply a top marginal income tax rate in perpetuity for a one-time event that may or may not occur.

Given the dearth of bidders during the pre-signing phase, the absence of strategic bidders and private equity bidders who dropped out of the company sale process, one may argue that perhaps Dell should not have been sold to any entity at that particular point in the company's history at a transaction price of \$13.75 per share.

It seems that once the company sale process had commenced, the train had left the station, and there was no inclination to walk away and wait for the valuation gap to narrow in future years.

### Notes:

1. In re Appraisal of Dell Inc., C.A. No. 9322-VCL, 2016 WL 3186538 (Del. Ch. May 31, 2016).
2. Id. at \*29.
3. Id. at \*32.
4. Id.
5. Id. at \*28.
6. Id. at \*1.
7. Id. at \*6.
8. Id. at \*1.
9. Id. at \*2.
10. Id. at \*5.
11. Id. The Opinion did not specify how long it would take to achieve that enterprise value.
12. This type of income approach to valuation is known as the direct capitalization of cash flow method.
13. The Opinion did not provide details as to the key variables used by Dell management to reach this valuation opinion.
14. In re Appraisal of Dell Inc., 2016 WL 3186538 at \*5.
15. Id. at \*6.
16. Id. A "sponsor" is a term for a leveraged buyout fund.
17. Id. The Opinion did not provide further detail as to the key variables used for JPMorgan's DCF analyses. It should be noted that sell-side analysts typically do not forecast financial results

beyond the ensuing two fiscal years, and Dell was in the throes of a transformation in its product and services portfolio that Mr. Dell opined would require sacrificing short-term results for long-term performance. When a company is either in transformation or experiencing unusually positive or negative financial results, it may be advisable, depending on other facts and circumstances, for the terminal year projection for a DCF valuation to be a year in the future when the subject company's positive or negative growth is projected to have stabilized. The terminal year projection may then better reflect the subject company's expected long-term growth in revenue and free cash flow.

18. Id. at \*7.
19. Data obtained from S&P Capital IQ.
20. In re Appraisal of Dell Inc., 2016 WL 3186538 at \*7.
21. Id. at \*8.
22. Id.
23. Id..
24. Id. at \*9
25. Id.
26. Id. Chancery Court, in this matter, later cited an article by renowned M&A attorney Martin Lipton that concurred with the issue of near-term focus by investors in the capital markets. See Martin Lipton & Marshall P. Shaffer, "Wachtel Lipton Discusses Short-Term Investors, Long-Term Investments and Firm Value," *Blue Sky Blog*, Columbia Law School (February 3, 2016).
27. Id.
28. Id. at \*10.
29. Id.
30. Id.
31. Id. at \*10–11.
32. Id. at \*11.
33. Id. at \*12–14.
34. Id. at \*14.
35. Id..
36. Id. at \*14–15.
37. Id. at \*15.
38. Id. at \*17.
39. Id. at \*18.
40. Id. at \*19.
41. Tom Krazit, "Michael Dell Back as CEO; Rolling Resigns," *www.cnet.com* (December 7, 2007).
42. Paul Gompers, Steven N. Kaplan, and Vladimir Mukharlyamov, "What Do Private Equity Firms Say They Do?" Harvard Business School working paper 15-081 (2015): 3, 10.
43. Amy Or, "Average Private Equity Hold Times Drop to 5.5 Years," *Wall Street Journal* (June 10, 2015).
44. In re Appraisal of Dell Inc., 2016 WL 3186538 at \*12.
45. Id.
46. Id. at \*10–11.
47. Id., nn.20 & 21.
48. Id. at \*29–32.
49. Id. at \*32–36.
50. Id. at \*36–37.
51. Id. at \*38–44.
52. Id. at \*45–51.
53. Id. at \*31.
54. Id.
55. Id. at \*30.
56. Id.
57. Id. at \*35.
58. Lipton and Shaffer, "Wachtel Lipton Discusses Short-Term Investors, Long-Term Investments and Firm Value."
59. In re Appraisal of Dell Inc., 2016 WL 3186538 at \*36.
60. Id., n.36.
61. Id. at \*38.
62. Id. at \*39, citing *Glob. GT LP v. Golden Telecom, Inc.* (Golden Telecom I), 993 A.2d 497, 508-509 (Del. Ch. 2010).
63. Id. at \*42.
64. Id. at \*45.
65. Id. at \*46.
66. *Highfields Capital, Ltd. v. AXA Fin., Inc.*, 939 A.2d 34 (Del. Ch. 2007).
67. In re Appraisal of Dell Inc., 2016 WL 3186538 at \*47.
68. Id.
69. Shannon P. Pratt, *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*, 5th ed. (New York: McGraw-Hill, 2008): 244.
70. In re Appraisal of Dell Inc., 2016 WL 3186538 at \*47.
71. Federal Reserve Bank of Philadelphia, *Livingston Survey* (December 12, 2012).
72. In re Appraisal of Dell Inc., 2016 WL 3186538 at \*47–48.
73. Id. at \*49.
74. Id. at \*49–51.
75. In *Highfields Capital, Inc. v. AXA Fin., Inc.*, the court opined that substantial weight should be given to the merger price as an indicator of value provided that the merger resulted from an arm's-length process between two independent parties. In *Appraisal of Dell Inc.*, the court did not cast doubt on whether the sales process and terms were at arm's length from a statutory duty of loyalty perspective, but rather scrutinized more closely the fairness of the consideration because it was an MBO.
76. In re Appraisal of Dell Inc., 2016 WL 3186538 at \*21.
77. Id. at \*39.

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### Transfer Pricing Testifying Expert Services

In the matter of *Amazon.com, Inc. & Subsidiaries v. Commissioner* (148 T.C. No. 8 (2017)), the U.S. Tax Court found in favor of the taxpayer plaintiff. The case involved a 2005 cost sharing arrangement that Amazon entered into with its Luxembourg subsidiary. Amazon granted its subsidiary the right to use certain pre-existing intangible property in Europe, including the intangible assets required to operate Amazon's European website business. The Tax Court held that (1) the Service's determination with respect to the buy-in payment was arbitrary, capricious, and unreasonable; (2) Amazon's CUT transfer price method (with some upward adjustments) was the best method to determine the requisite buy-in payment; (3) the Service abused its discretion in determining that 100% of technology and content costs constitute intangible development costs (IDCs); and (4) Amazon's cost-allocation method (with certain adjustments) was a reasonable basis for allocating costs to IDCs. Robert Reilly, a managing director of our firm, provided expert testimony on behalf of taxpayer Amazon in this Section 482 intercompany transfer pricing case.



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## Income Taxation Testifying Expert Services

On February 21, 2017, the U.S. Court of Federal Claims dismissed (with prejudice) the complaint filed by plaintiff Washington Mutual, Inc., against the United States (Nos. 08-321T, 08-211T). The taxpayer plaintiffs were seeking a refund of at least \$149 million in certain federal taxes paid by H.F. Ahmanson & Co. (“Ahmanson”) during several tax years in the 1990s, based upon the abandonment loss and amortization deductions available under the Internal Revenue Code. The case involved the fair market value determination of the regulatory right to open deposit-taking branches in certain states other than California (“branching rights”), the contractual approval right to treat the goodwill created by certain acquisitions as an asset for regulatory accounting purposes (“RAP rights”), and certain other intangible assets. Curtis Kimball, a managing director of our firm, critiqued the valuation report presented by the plaintiff’s valuation expert and provided rebuttal expert testimony on behalf of the U.S. Department of Justice regarding the valuation of branching rights and RAP rights intangible assets. The Claims Court dismissed the plaintiffs’ tax refund claims.

## Condemnation Proceeding Testifying Expert Services

In the matter of *Town of Mooresville v. Indiana American Water Company* (2014), Willamette Management Associates was engaged by the defendant to perform a valuation analysis of the Indiana American Water Company (the “company”) retail water system located in Mooresville, Indiana. The purpose of the analysis was to assist the company in a condemnation proceeding initiated by the town of Mooresville, Indiana. Our assignment was to estimate the fair market value of the company total operating assets (as part of a going concern). The primary valuation issue in the dispute was: should all of the company operating assets (financial asset accounts, tangible property, and intangible assets) be assigned value in a condemnation proceeding? Or, should the condemnee receive the accounting book value (or regulatory “rate base”) of the tangible assets only? After a jury trial, at which Robert Reilly, a managing director of our firm, provided expert testimony, the jury’s decision favored our analysis and awarded Indiana American Water Company the value of both its tangible assets and its intangible assets.



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## Family Law Testifying Expert Service

In a marital dissolution matter in 2016, the Superior Court of Arizona, Maricopa County, found in favor of the husband in the family law case *In re the Marriage of Julie Anne Bowe and Gregory James Vogel, Sr.* (No. FC2014-001952), Willamette Management Associates was engaged by Gregory Vogel, as president and owner of Land Advisors Organization (LAO), a national land brokerage business, to prepare a valuation analysis. Charles Wilhoite, a managing director of our firm, provided expert testimony. The purpose of the analysis was to assist with facilitating the property settlement aspects of the parties' marital dissolution. The primary valuation issues in the dispute were (1) the most appropriate valuation date and (2) the appropriate historical period of operating results to be relied on as a foundation for estimating the expected future earnings in a capitalization of cash flow business valuation analysis. The Court favored the Willamette positions, resulting in a judicially concluded value for LAO significantly lower than the opinion offered by the opposing valuation experts. This case is currently being appealed.

## Bankruptcy Testifying Expert Services

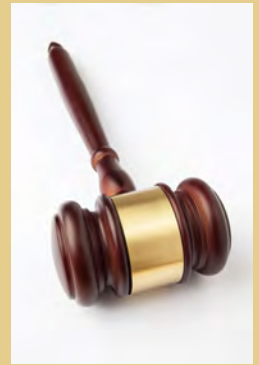
Willamette Management Associates was engaged by the proponents of a reorganization plan to prepare a declaration in the matter of *In re Plant Insulation Company* (No. 09-31347, U.S. Bankruptcy Court, N.D. Cal. 2014). Our assignment was to review the declarations of the opposing experts in this case and to offer our opinion on certain shareholder agreements related to the matter. In particular, we were asked to review a right of first offer agreement and to opine on its impact on the control, transfer, and value of common stock and warrant interests in Bayside Insulation and Construction, Inc. Following a trial, at which Willamette managing director Curtis Kimball offered rebuttal expert testimony, the U.S. Bankruptcy Court accepted the plan of reorganization proposed by the Futures Representative of the Official Committee of Creditors.



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## Property Taxation Testifying Expert Services

Willamette Management Associates was engaged by the plaintiff to prepare a forensic analysis expert report for *Sandy Creek Energy Associates, LP, and Brazos Sandy Creek Electric Cooperative, Inc., v. McLennan County Appraisal District* (No. 2014-3336-4, Dist. Ct. McLennan County, Texas, August 2016). The purpose of the Willamette expert report and expert testimony was to assist the owners of the Sandy Creek coal-fired electric generating plant (the “plant”) in a property taxation dispute with the McLennan County Appraisal District (the “district”). Our assignment was to review and rebut the unit valuation expert report and testimony provided by the district’s valuation expert. One issue in the dispute was the amount of economic obsolescence associated with the plant. As of the property tax assessment date, the plant’s cost to produce electricity was significantly greater than the wholesale price of electricity. As described in the Willamette expert report, these operating conditions indicated that economic obsolescence was present in the plant. After a week-long trial, at which Willamette managing director Robert Reilly offered expert testimony, a jury decided that the fair market value of the plant was less than half of the value asserted by the district. This jury decision significantly favored the taxpayer, and it resulted in a substantial reduction in the plant’s property tax assessment.



## Dissenting Shareholder Rights Testifying Expert Services

In the case, *In Re Appraisal of The Orchard Enterprises, Inc.* (No. 5713-CS, 2012 WL 2923305 (Del. Ch. 2012), *aff’d* No. 470, 2013 WL 1282001 (Del. 2013)), Willamette Management Associates was retained on behalf of the petitioners in a case where the subject of the dispute was the fair value of the Orchard Enterprises, Inc. (“Orchard”) common stock at the time the company was taken private. Orchard was a digital media services company specializing in music from independent labels with a mission to acquire distribution rights, build sales channels, and monetize these rights in new and innovative ways. The petitioners had received \$2.05 per share in the going-private transaction. At trial, Tim Meinhart, a managing director of our firm, testified that the fair value of the Orchard common stock at the time of the go-private transaction was \$5.42 per share. The court agreed with our overall conclusion that the transaction occurred at a price that was lower than the fair value of the stock. The court concluded that the common stock fair value was \$4.67 per share at the time of the go-private transaction.



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# Considerations of the Merger Price in Delaware Appraisal Rights Proceedings

Ben R. Duffy

*This discussion provides a review of certain Delaware Court of Chancery decisions involving dissenting shareholder appraisal rights actions. Specifically, the discussion focuses on three appraisal rights proceedings in which fair value was determined to either equal—or deviate from—the actual merger transaction price. This discussion (1) describes the facts of the cases, (2) explains the Chancery Court’s reasoning behind its decisions, and (3) recommends a conclusion regarding the implications of the merger price in Delaware appraisal rights proceedings.*

## INTRODUCTION

In many statutory dissenting shareholder appraisal rights actions, the finder of fact has to decide whether the actual transaction merger price was, in fact, the appropriate fair value for the dissenting shareholders’ stock.

The merger price has been used in the determination of fair value as early as 2004. More specifically, in the *Union Illinois v. Union Financial Group* matter,<sup>1</sup> the court found that the merger price was equivalent to the fair value of the business. The December 31, 2001, acquisition of Union Financial Group, Ltd. (“UFG”), resulted in a dissenting shareholder appraisal rights dispute.

In *Union Illinois 1995 Investment L.P.* (“Union Illinois”), the petitioner, did not agree that the merger price was fair. Union Illinois pursued a dissenting shareholder appraisal rights action against UFG. Union Illinois argued for a significantly greater fair value price than the actual merger price. In the instant case, UFG provided evidence supporting the existence of a robust transaction process involving numerous informed bidders with the ability to purchase UFG.

Because a vigorous sale process was undertaken, the court ruled that the fair value of UFG was equal to the merger price—less synergies. In general, the merger price may be considered as an indication

for fair value in dissenting shareholder proceedings, post *Union Illinois v. UFG*. In dissenting shareholder appraisal rights fair value matters, analysts should consider the merger price indication and understand the process by which the actual merger transaction was completed.

## JUDICIAL DECISIONS REGARDING MERGER PRICE AS AN INDICATION OF FAIR VALUE

Dissenting shareholder appraisal rights litigation sometimes arises after a merger or an acquisition. Such litigation occurs when shareholders are dissatisfied with the transaction process or the transaction pricing. Pursuant to 8 Del. C. Section 262 (the “Appraisal Statute”), “once the procedural strictures are met and entitlement to appraisal is perfected, the Appraisal Statute provides shareholders who did not vote in favor for certain transactions a statutory right to have the court value their shares.”

This appraisal right has opened the door to frequent dissenting shareholder litigation in the Delaware Court of Chancery.

It is not uncommon for noncontrolling shareholders to form opinions that a transaction was not completed in their best interest. Noncontrolling



shareholders can reach this conclusion when a valuation analyst concludes a significantly greater fair value estimate than the transaction price.

A possible error in the rationale of former dissenting shareholders is to disregard the effect of market conditions on the transacted share prices. Market conditions can create a premium or discount in the merger price when compared to a fair value analysis that is based on the business valuation income approach.

Figure 1 presents trends in dissenting shareholder appraisal rights litigation for mergers and acquisitions from 2007 through the first half of 2016. Shareholder appraisal rights litigation seemed to be slightly more common from 2010 to 2014, but the number of shareholder litigation matters per year has decreased over the last two years.

The recent decrease in dissenting shareholder appraisal rights litigation is perhaps due to the *Trulia* decision, which denounced disclosure-only settlements.<sup>2</sup>

## PERCENTAGE OF TRANSACTIONS SUBJECT TO DISSENTING SHAREHOLDER APPRAISAL RIGHTS LITIGATION

Dissenting shareholder appraisal rights matters recently decided in the Chancery Court illustrate the controversial nature of fair value determination. These fair value matters can provide a perspective of the judicial acceptance or rejection of merger price as an indication of the subject company stock financial fair value.

## IN RE APPRAISAL OF PETSMART, INC.

On March 11, 2015, BC Partners, Inc., acquired PetSmart, Inc., for a purchase price of \$83 per share.<sup>3</sup> The dissenting shareholders were dissatisfied with the transaction price and petitioned for the use of a discounted cash flow (“DCF”) valuation method to determine the PetSmart, Inc., share fair value. Both sides presented valuation analyses to conclude fair value.

J.P. Morgan (“JPM”) performed a fairness opinion for PetSmart, Inc., and determined that \$83 was a fair transaction price. Compass Lexecon was engaged by the shareholders and prepared a valuation analysis that resulted in a fair value of \$128.78 per share.<sup>4</sup>

Both valuation opinions—that is, the opinions issued by the valuation analysts retained by both the petitioners and the defendant—were based on the DCF business valuation method.

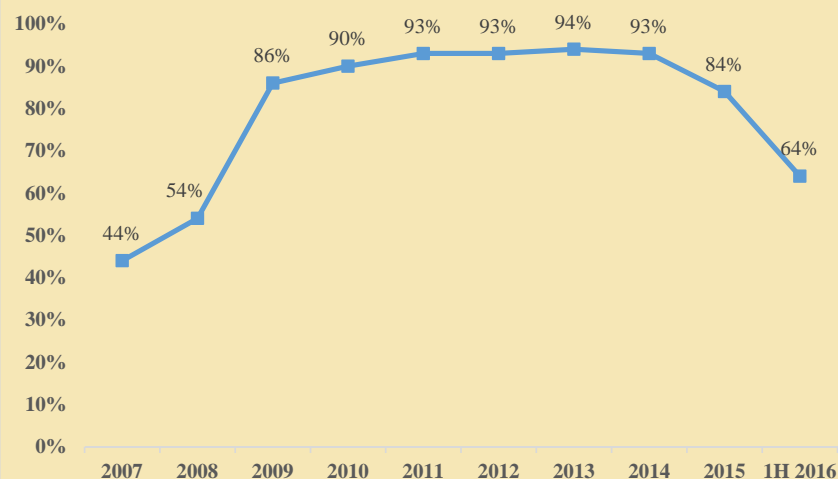
## Financial Projections

Both valuation analysts relied on management-prepared projections of future cash flow in order to determine the present value of PetSmart, Inc. During the proceedings, management argued that they succumbed to significant pressure from the board of directors to create “aggressive and ultimately unrealistic” projections.<sup>5</sup>

The petitioner’s valuation analysis was based on the assumption that the management projections were reasonable from a financial perspective.<sup>6</sup>

It is important that the valuation analyst develop a comprehensive understanding of any management-prepared financial projections relied on in the valuation. It is recommended that an analyst have an understanding of the purpose of the projections, as well as how the projections were prepared. In certain situations, an analyst may consider normalizing the management-prepared projections if those financial projections appear to be unreasonable.

**Figure 1**  
Percentage of Transactions Subject to Dissenting Shareholder Litigation



Source: *Shareholder Litigation Involving Acquisitions of Public Companies* (Cornerstone Research 2016): 1.



In the instant case, it appears that the petitioner's valuation analyst did not have a comprehensive understanding of management-prepared financial projections. The petitioner's valuation analysis relied on the management-prepared financial projections without any normalization adjustment. Because the court concluded that the management-prepared projections were unrealistic, the court concluded that the petitioner's analyst overestimated the fair value of PetSmart, Inc.<sup>7</sup>

### J.P. Morgan Fairness Opinion

The PetSmart, Inc., board of directors knew the management-prepared projections were too aggressive. Because the board was not confident in the management-prepared financial projections, it directed JPM to conduct a sensitivity analysis. The sensitivity analysis provided a fair value range of \$65.00 to \$95.25 per share.

The intended goal of the sensitivity analysis was to prove the fairness of the transaction price decided between the PetSmart, Inc., board of directors and BC Partners.

The dissenting shareholders argued that the JPM fairness opinion relied on a weighted average cost of capital ("WACC") that was too high. All else being equal, the higher the WACC applied in the DCF method, the lower the indicated value. The valuation decision does not indicate that JPM had intentionally increased the WACC beyond a reasonable level in order to reach a specific value conclusion.

### The Judicial Decision

In the *Union Illinois v. UFG* decision, the court concluded that the merger price was the "best evidence of fair value" when the transaction "resulted from a competitive and fair auction, which followed

a more-than-adequate sales process and involved broad dissemination of confidential information to a large number of prospective buyers."<sup>8</sup>

Precedence set from the *Union Illinois v. UFG* decision was cited in the *In Re Appraisal of PetSmart, Inc.*, decision.

The court described the PetSmart, Inc., transaction process as being "a robust auction process, where anybody who had an interest in this company had the opportunity to engage with the company and see whether they wanted to buy the company."

Because the auction process included a significant number of buyers and a fair bidding process, the court concluded that the transaction price was indicative of the PetSmart, Inc., stock fair value.<sup>9</sup>

## JOHN DOUGLAS DUNMIRE V. FARMERS & MERCHANTS BANCORP OF WESTERN PENNSYLVANIA, INC.

On October 1, 2014, Farmers & Merchants Bancorp of Western Pennsylvania, Inc. ("F&M"), was acquired by NexTier, Inc. The F&M transaction was based on a stock-for-stock basis resulting in a value of \$83 per share.

The noncontrolling shareholder petitioners were displeased with the transaction price and the transaction process. That was because, according to the dissenting shareholder petitioners, the transaction was not transacted at arm's length, and the company had not undergone a robust company sale process.<sup>10</sup>

The petitioners' analyst determined the fair value of F&M to be 66 percent greater than the actual transaction price, at \$137.97 per share. The respondents' analyst estimated that the fair value of F&M was 8 percent less than the actual transaction price, at \$76.45 per share.<sup>11</sup> The following paragraphs provide analysis and discussion of this dissenting shareholder appraisal rights proceeding.

### Opinions of Value

The petitioners' analyst concluded a per-share value of \$137.97 using a guideline merged and acquired company ("GMAC") method analysis. Using the GMAC method analysis, the analyst observed prices derived from the acquisition of other banks and their corresponding price-to-earnings pricing multiples in order to determine a fair value for F&M. After deriving a price-to-earnings pricing multiple from the transactions, the 2013 net earnings of F&M were multiplied by the corresponding pricing multiple.

The petitioners' analyst also applied a discounted cash flow method analysis (that is, an income approach method) in order to further support the GMAC analysis.

The respondents' analyst weighted these three equally: (1) the capitalized net income method, that is, an income approach method; (2) the GMAC method; and (3) the guideline publicly traded company ("GPTC") method.

A valuation of \$76.45 per share resulted from the respondents' analyst use of the income and market approaches listed above.

Because both analysts relied on an income approach that capitalized F&M income based on a one-year period, a capitalized net income analysis was relied on by the court in the appraisal rights proceeding.<sup>12</sup>

## Merger Price

In certain past appraisal rights actions, the court has found the merger price to be the "best evidence of fair value" when the transaction "resulted from a competitive and fair auction, which followed a more than adequate sales process and involved broad dissemination of confidential information to a large number of prospective buyers."<sup>13</sup>

In some instances, the merger price may reflect fair value. However, since the instant transaction involved related parties and no robust sale process, the court concluded that the merger price could not be used to determine the fair value of the stock.

Allegedly, the F&M transaction was not between unrelated parties, did not undergo an auction process, and did not involve the dissemination of confidential information to a large pool of prospective buyers. There was evidence that the merger price considered the noncontrolling shareholders, but there was not enough evidence to support the use of merger price as fair value.<sup>14</sup>

Since the court concluded that the sale process did not justify the application of merger price as fair value, other valuation approaches were considered in the judicial determination of fair value.

## Guideline Merged and Acquired Company Transactions

The petitioners' analyst relied on a GMAC method analysis in order to estimate the fair value of F&M. The analysis included a comprehensive search of 160 community bank transactions, and the selection of eight guideline transactions that were the most reasonably comparable to F&M.

The petitioners' analyst then multiplied the median price-to-earnings pricing multiple based on the eight transactions, to the estimated 2013 F&M earnings. After the application of adjustments for F&M specific factors, the petitioners' analyst arrived at a value of \$137.97 per share.<sup>15</sup>

The court considered the eight guideline transactions to reasonably represent the F&M business operations, but the court expressed other concerns with the transaction analysis. The consideration of the inclusion of transaction synergies is a necessary procedure when using the GMAC method.

In the Chancery Court, it has been established that "in an arm's-length, synergistic transaction, the deal price generally will exceed fair value because target fiduciaries bargain for a premium that includes . . . a share of the anticipated synergies."<sup>16</sup>

In other words, if synergistic value is present in a transaction, then the price is likely too high. In the instant case, the court concluded that inclusion of synergistic values resulted in the application of a higher price-to-earnings pricing multiple.

Determining if synergistic values are present, and if so, what percentage of the merger price includes synergistic value, makes the comparable transaction method difficult to apply. However, if ample evidence supports the conclusion that the transactions were not strategic acquisitions and/or a convincing argument is made to support an adjustment for synergies, then the method could be applicable in an appraisal rights proceeding.

The petitioners' analyst conceded that the observed transaction prices were likely to include synergistic value and that he failed to adjust for the additional synergies in the transactions. Therefore, the court made the decision to disregard the GMAC method.<sup>17</sup>

## Appraisal-Related Decision

Because the GMAC method was rejected, the court relied solely on a capitalized net income analysis.

A capitalized net income analysis relies on a single year of earnings and applies a capitalization rate in order to estimate the present value of the subject company. Normalization adjustments may be applied based upon the capital structure of the subject company.

The petitioners' analyst estimated that net income would be the same in 2014 as 2013, while the respondents' analyst estimated the net income of F&M for a period ending in 2015 (post-merger).<sup>18</sup>

The respondents' estimate of net income became the starting point of the court's analysis—after the

court rejected the petitioners' estimate of zero growth between 2013 and 2014.

## Capital Asset Pricing Model

Once a long-term growth rate is established, the next step in the capitalized income analysis is to calculate the present value discount rate of the subject interest. The court concluded that the capital asset pricing model ("CAPM") was a reasonable method for determining the present value discount rate.

Both analysts agreed on a risk-free rate based on the yield on a 20-year U.S. Treasury bond and a size risk premium for 9th and 10th decile companies (based upon market capitalization) from the Duff & Phelps, LLC, *2014 Valuation Handbook: Guide to Cost of Capital* ("Duff & Phelps Handbook").<sup>19</sup>

However, both parties did not agree on the appropriate equity risk premium ("ERP") for the F&M CAPM estimate.

The petitioners' analyst relied on an ERP derived from an online survey of financial officers and executives, known as the "Duke Study." The Duke Study had never been used in a Delaware dissenting shareholder appraisal proceeding, and there was little evidence to support its application to F&M. Therefore, the court did not allow the Duke Study ERP conclusion to be used for the calculation of the F&M CAPM.<sup>20</sup>

In contrast, the respondents' analyst relied on a supply-side ERP from the *Duff & Phelps Handbook*. Since the supply-side ERP was used in previous Delaware court proceedings, the court relied on it in the F&M CAPM calculation estimate.<sup>21</sup>

The final step in the CAPM was to derive a beta representative of F&M. After the court rejected both analysts' beta estimates, the court selected a beta derived from the banking industry as published in the *Duff & Phelps Handbook*.

## Expected Growth Rate

The petitioners relied upon the historical growth of F&M to support the growth rate selection. The court determined that historical growth was too upwardly biased due to overcapitalization in early years.

The respondents selected a growth rate of 3 percent, which considered the strategic plan of F&M. The selected long-term growth rate of 3 percent was used for other mature firms based on prior Delaware Court of Chancery decisions.<sup>22</sup>

The court determined that a 3 percent expected long-term growth rate was applicable to F&M.

## The Court's Decision

After an adjustment for excess capital, the court concluded a share price of \$91.90 (approximately 11 percent greater than the merger price) by applying the aforementioned income approach.

In this case, the court concluded that (1) the merger was not transacted at arm's length, and (2) the merger was not subject to a robust sale process. Therefore, the court found that the merger price was not an accurate indication of fair value.

## IN RE APPRAISAL OF SWS GROUP, INC.

Stockholders of the SWS Group, Inc. ("SWS"), demanded a statutory appraisal of their shares after the acquisition of SWS. Based on the conclusion arrived at in *In Re Appraisal of Petsmart, Inc.*, it was understood that a sale involving a rigorous sale process may be a reasonable indication of fair value.<sup>23</sup>

In the instant case, the sale process of SWS was not considered to be rigorous, and, therefore, the court concluded that the merger price was not a reliable indication of fair value.

On January 1, 2015, SWS was acquired by Hilltop Holdings, a creditor of SWS. The shareholders of SWS received cash and stock worth \$6.92 per share. The dissenting shareholders argued that the transaction was not done in their best interest and demanded an appraisal proceeding.

Both the petitioners and respondents argued against the transaction price. The dissenting shareholders argued that the sale process was flawed, making the transaction price an inaccurate representation of share price. In contrast, the respondents argued that the merger price included synergies, proving the transaction price was too high.

SWS entered into a loan agreement with Hilltop Holdings in 2011, which made it a debtor to Hilltop Holdings. Hilltop Holdings later acquired PlainsCapital, a bank holding company similar to SWS, making SWS a synergistic target for Hilltop Holdings. Prior to the transaction projection, Hilltop Holding's internal projections showed adjustments for the integration of SWS that included cost savings through the reduction of overhead.<sup>24</sup>

There was enough evidence for the court to decide the transaction included synergistic elements and was not an accurate indication of fair value.



## Valuation Analysis

The petitioners engaged a valuation analyst who relied on both the DCF method and GPTC method. Placing an 80 percent weighting on the DCF method and a 20 percent weighting on the GPTC method, the valuation analyst arrived at a fair value of \$9.61 per share, a value nearly 30 percent greater than the transaction price. One argument for the inflated price was that SWS was “on the verge of a turnaround.”<sup>25</sup>

The respondents’ valuation analyst relied solely on the DCF method, resulting in a valuation of \$5.17 per share (approximately 25 percent below the transaction price). This conclusion was supported by the claims that the synergistic value was incorporated in the transaction price.

## Discounted Cash Flow Method

The court considered several valuation methods, but it decided to rely exclusively on the DCF method.

The GPTC method was considered by the court, but is only reliable if the selected companies accurately compare to the subject interest. The court decided that the companies selected by the petitioners’ valuation analyst were not comparable to SWS in terms of size, business lines, and performance. The court also decided that identifying guideline companies for SWS would be too difficult, due to the nature of SWS business operations.<sup>26</sup>

The court did not solely rely on either the petitioners’ DCF method analysis or the respondents’ DCF method analysis. Rather, the court performed its own DCF method analysis after analyzing and accepting specific inputs.

It is generally understood that the DCF method is only as reliable as the projections used in the analysis. It is also generally understood that projections prepared prior to a merger are more reliable than projections produced specifically for litigation purposes.

In the instant case, three-year projections were prepared by management on an annual basis prior to the transaction. The petitioners argued that the projections relied upon for the period analyzed were “downside” projections, when compared to previously prepared projections.<sup>27</sup>

In contrast, management believed that the projections were overly optimistic, since they had never met projections in the past. The petitioners’ analyst projected an additional two years past management’s projections of straight-line growth, with the guideline companies analysis as part of his basis. Since it was already determined that the guideline companies selected did not properly represent the

business model, size, or environment of SWS, the additional two-year period was not included in the court’s DCF analysis.

## Warrant Exercise

There was also controversy regarding the adjustment for a warrant exercised in 2014 and its effect on the capital levels of SWS. The petitioners argued that the warrant would not have been exercised but for the merger.

According to Section 262 (h) of Delaware General Corporation Law, “the Court shall determine the fair value of the shares exclusive of any element of value arising from the accomplishment or expectation of the merger or consolidation, together with interest, if any, to be paid upon the amount determined to be the fair value. In determining such fair value, the Court shall take into account all relevant factors.”

After the exercise of the warrant, the shares issued were all used to vote in favor of the merger.<sup>28</sup> This vote created the appearance that the exercising of the warrant was dependent upon the merger.

Because the warrants were issued independently of the merger, the court determined that the warrant exercise was not conditional to the merger and would have been exercised regardless of whether the merger occurred or not.<sup>29</sup>

The petitioners argued that if the exercising of the warrant is considered as part of the SWS operations, then SWS would have had more regulatory capital, requiring an adjustment for \$117.5 million. The court’s adjustment decision is summarized below.

## Regulatory Capital Analysis

In a valuation analysis, an analyst may apply an adjustment for excess or deficient capital. However, if the capital in question is necessary to run the business, then it is not typically considered excess capital, and it is not adjusted.

The petitioners argued that the excess regulatory capital associated with the exercise of the warrants must be accounted for the same way that excess cash is accounted for in a DCF method valuation. In a DCF method valuation, an adjustment for excess/nonoperating cash and equivalents is typically considered.

In the instant case, the extra regulatory capital associated with the warrants was determined to be equivalent to stockholders’ equity and not a cash equivalent. Cash associated with the warrants exercised was received in 2011 upon the original warrant agreement, and it should not be adjusted for in 2014.<sup>30</sup>

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## **“Transactions that do not undergo a robust bidding process involving third parties often do not result in a supportable indication of fair value.”**

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Management projected that the warrant exercise would occur in July of 2016. Because the warrants were exercised before the projections had anticipated, adjustments for the reduction in interest payable over the two years was necessary. This resulted in a reduction of interest expense of \$7 million in 2015 and \$4.027 million in 2016.<sup>31</sup> This created an increase in net income for the two periods, and, therefore, added value.

### **The Discount Rate**

Both parties agreed that the CAPM was an appropriate method for determining the discount rate of SWS. However, the analysts disagreed on certain CAPM financial variables.

The petitioners' analyst applied a supply-side ERP, which has been considered the “default” method based on recent Delaware litigation, while the respondents' analyst applied the historic ERP.<sup>32</sup>

The court concluded that the supply-side ERP should be applied based on precedence and lack of basis for the historic equity risk premium.

Each analyst also used a different estimate of beta—1.10 for the petitioners and 1.18 for the respondents. The petitioners' beta estimate was based on guideline companies that were previously determined to be insufficiently comparable to SWS.

The petitioners' analyst observed several points of data and concluded a beta based on a median of the data points. In contrast, the respondents' analyst estimated beta by observing stock price changes of SWS over the past two years.

Because the merger discussion between the merger parties was known and knowable during this period, the stock price was likely affected. Therefore, the beta derived over the two-year period prior to the merger transaction was too distorted by the transaction to use in the development of the CAPM.

Despite the lack of comparability between SWS and the selected guideline companies, the beta determined by the petitioners was used in the court's decision.

The final consideration of the CAPM was to determine the amount of the size premium for SWS. Both analysts agreed that the *Duff & Phelps Handbook* was an appropriate reference source for determining a size premium; however, each party used a different market capitalization range in order to determine the size premium.

The court found that neither argument was more persuasive than the other. Therefore, the court relied upon the mean of both size premium estimates.

### **The Judicial Decision**

The fair value of the SWS shares was determined to be \$6.38. Because of the value-adding synergies, the court found that the fair value was below the transaction price.

Understanding all aspects of a transaction is an essential procedure when determining if a litigation proceeding should be undertaken. Had the petitioners understood the synergistic value included in the transaction price, costly litigation may have been avoided.

### **CONCLUSION**

At first glance, the reliance on the transactional merger price appears to be an alternative to an expensive litigation proceeding involving the engagement of valuation analysts. In spite of supporting evidence of a robust sale process and the absence of synergistic value, appraisal rights claims may still proceed. This is because dissenting shareholders are often dissatisfied with the transaction price.

After the examination of several appraisal rights cases in the Delaware Court of Chancery, it appears that a merger price may be considered an indication of fair value in certain cases. However, it should not be assumed that the merger price is consistent with fair value. Transactions that do not undergo a robust bidding process involving third parties often do not result in a supportable indication of fair value.

Even if a transaction is completed at arm's length and involves a robust sale process, other factors are typically considered before reaching a fair value conclusion. Fair value, in dissenting shareholder appraisal rights litigation, does not include synergies, therefore, an adjustment for synergistic value may be made in the determination of fair value.

It is important for an analyst to be aware of synergistic values included in transaction prices when applying a GMAC method analysis. If synergies are included in the merger price, then the generally accepted business valuation approaches should be considered to estimate the subject stock fair value.

Due to the complexities and unique circumstances of mergers and acquisitions, dissenting shareholder appraisal rights proceedings in the Chancery Court will continue to involve valuation analysts.

*Continued on page 96*

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- shareholder oppression and dissenting shareholder rights, family law, gift/estate/income tax, condemnation and eminent domain, breach of contract/noncompete/buy-sell agreement, and similar claims

#### Bankruptcy and insolvency controversy

- solvency/insolvency issues, fraudulent conveyance/preference items, collateral value, voting/liquidation preference, reasonableness of the plan of reorganization

#### Property tax controversy

- taxpayer business (unit value) and intangible asset valuations
- capitalization rate analysis and special purpose property obsolescence analysis

#### Gift and estate tax controversy

- business enterprise, security, fractional interest, and intangible asset valuations

#### Income tax controversy

- business enterprise, fractional interest, and intangible asset valuations
- charitable contribution, purchase price allocation, partnership basis, insolvency, change of control, worthless stock, intercompany transfers

#### ESOP formation and other employer stock transactions

- ESOP sponsor company annual stock valuations
- ESOP/ERISA transaction fairness financial adviser expert testimony

#### Capital market transaction controversy

- fraud and misrepresentation in merger, acquisition, and going private transactions
- fairness, solvency and adequate consideration

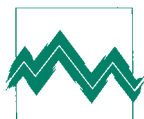
#### Not-for-profit entity transaction

- business/professional practice purchase or sale price, goods or services contracts, and reasonableness of professional/executive compensation
- fairness, fair market value valuation, private inurement, excess benefit, intermediate sanctions, and reasonableness of compensation opinions

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# Judicial Opinions regarding the Constellis Group, Inc., and the SJP Group, Inc., ESOP Transactions

Chip Brown and Kyle Wishing

*This discussion provides an overview of two recent judicial opinions related to employee stock ownership plan (“ESOP”) installation transactions. While the judicial opinions are specific to the circumstances of the Constellis Group, Inc. (“Constellis”), ESOP transaction and the SJP Group, Inc. (“SJP”), ESOP transaction, these opinions may provide useful insights for prospective ESOP companies and professional ESOP advisers. The following discussion (1) introduces the two lawsuits, (2) provides context for the subject ESOP transactions, (3) lists the arguments that were presented in court, and (4) summarizes the judicial opinions.*

## THE CONSTELLIS LITIGATION

On March 13, 2017, the judicial opinion was released for *Brundle, on behalf of Constellis Employee Stock Ownership Plan v. Wilmington Trust N.A.* (the “Constellis litigation”).<sup>1</sup>

The Constellis litigation was petitioned by Tim P. Brundle, a former employee of Constellis and a former participant in the ESOP sponsored by Constellis. The Constellis ESOP was established in December 2013, when the ESOP acquired 100 percent of the outstanding Class A common stock of Constellis (the “ESOP transaction”).

The Constellis lawsuit was filed against Wilmington Trust N.A. in connection with its role as trustee (the “trustee”) of the Constellis ESOP.

The plaintiff alleged that the ESOP transaction was a prohibited transaction under the Employee Retirement Income Security Act of 1974 (“ERISA”) Section 1106. The plaintiff alleged that the price of \$4,235 per share paid by the ESOP in the ESOP transaction was greater than the fair market value of the stock, which caused the ESOP to overpay for the interest by \$103,862,000.

The matter was tried in the United States District Court for the Eastern District of Virginia by Judge

Leonie M. Brinkema. The court ultimately awarded damages of \$29,773,250. The court estimated the damages amount by considering nine contested inputs into the valuation analysis for which the court concluded the fair market value of Constellis as of the transaction date.

## Background of Constellis

The predecessor of Constellis, Triple Canopy, Inc. (“Triple Canopy”), was formed by Thomas Katis and Matthew Mann in the fall of 2003. Triple Canopy was a private security firm that primarily served the U.S. Department of State and the U.S. Department of Defense (“DoD”). The company experienced steady growth as it was awarded several large contracts to provide fixed site security services.

Along the way, Triple Canopy acquired several other security companies and reorganized the companies as subsidiaries operating under Constellis. Triple Canopy was the largest subsidiary of Constellis.

Constellis entertained buyout talks from private equity firms in 2007 and again in 2012. However, neither transaction discussion ended in success. In 2012, Vestar Capital Partners was the potential acquirer. In the Vestar Capital Partners proposal,



the initial offer price was between \$340 million and \$350 million.

After due diligence was performed, Vestar decreased its offer price to \$275 million prior to closing. The decrease in the offering price caused the deal to crater.

## Background of the ESOP Transaction

In June 2013, a Constellis board member proposed the idea of forming an ESOP to the Constellis general counsel, Juliet Protas. Protas retained CSG Partners, LLC (“CSG”), to advise Constellis on the prospective formation of an ESOP.

Prior to the ESOP transaction, the Constellis equity ownership was as follows: Katis owned 31.1 percent, Mann owned 29.2 percent, Howard Acheson owned 11.1 percent, John Peters owned 5.6 percent, and other noncontrolling shareholders held the remaining equity (collectively, the “sellers”).

CSG prepared a series of presentations to advise the sellers and Constellis management on ESOP structured transactions. These presentations highlighted the ESOP as a liquidation strategy and promoted the tax benefits for the sellers. CSG did not recommend a traditional 100 percent ESOP.

Instead, CSG recommended an alternative strategy that consisted of a 90 percent equity interest held by the ESOP and warrants for 10 percent of the equity held by the sellers.

The warrants allowed the sellers to appoint a majority of board members until the warrants were exercised. On September 26, 2013, immediately after the CSG presentation, Constellis management and the sellers decided to move forward with the ESOP transaction.

Constellis hired the trustee to serve as the ESOP trustee at the recommendation of CSG. The trustee then hired a financial adviser and legal counsel for the proposed transaction. The trustee was officially retained on October 25, 2013.

## The ESOP Transaction

The ESOP transaction was structured in the same way it was proposed by CSG. The ESOP was to acquire all of the outstanding voting shares and the sellers were to receive warrants redeemable for 10 percent of the equity. The trustee’s financial adviser prepared a valuation analysis and a fairness opinion, which it presented to the trustee on November 14, 2013.



The financial adviser concluded that the fair market value per share of Constellis stock was between \$3,865 and \$4,600 with a median fair market value of \$4,235.

At the meeting, the trustee committee authorized the trustee team to negotiate a deal price between \$3,900 and \$4,235 per share with the stipulation that the sellers indemnify the full amount of a pending liability from the Defense Contracting Auditing Agency (“DCAA”).

The sellers communicated that there was urgency to accept the offer in order to close the transaction prior to year-end for Constellis to obtain favorable tax treatment. Noncontrolling shareholders needed to receive a tender offer at least 20 days prior to closing.

On November 13, 2013, CSG and the sellers proposed a sale price of \$4,525 per share. The trustee responded on November 15, 2013, with an offer price of \$3,900 per share. After a few more rounds of negotiating, the parties agreed to \$4,235 per share.

It was agreed that the Series A warrants (the warrant class that could elect members to the board) would expire 10 years from the transaction date.

Also, as part of the transaction, Constellis adopted a management retention plan, which provided a cash bonus to key managers if they agreed to stay with the company after the closing of the ESOP transaction. The cash bonus was set at 5 percent of the total transaction value. Stock appreciation rights (“SARs”) for key members of management were also approved but not issued as part of the transaction.

Further, the sellers and Constellis<sup>2</sup> agreed to “reasonable commercially acceptable representations and warranties,”<sup>3</sup> for an amount up to 30 percent of the transaction price. Losses due to a breach of representations and warranties would, first, be offset by the seller notes and, second, be paid in cash.

On November 18, 2013, the tender offer to non-controlling shareholders was issued. On December 20, 2013, the transaction was scheduled to close. The financial adviser updated its report prior to the closing date and maintained a similar range of value.

This analysis was presented to the trustee committee on December 18, 2013, and the transaction closed on December 20, 2013. In the transaction, the ESOP purchased 47,586.55 shares at \$4,235 per share, or a total purchase price of \$201,529,032.77. The transaction was funded with cash from Constellis (approximately 24 percent), a loan from Constellis (approximately 7 percent), and seller notes (approximately 69 percent).

## Post-ESOP-Transaction Developments

In early 2014, there were a number of items that negatively affected the Constellis business operations.

One of the largest contracts of Constellis was contested by a competitor and subsequently rebid. Constellis was awarded a smaller portion of the contract, which resulted in:

1. a \$100 million decrease to revenue for the project and
2. a delay on the receipt of project revenue.

Also in 2014, several other project developments negatively affected the Constellis business pipeline. A fixed-site security project in Kuwait on which Constellis was serving as a subcontractor was rebid. Constellis lost “tens of millions of dollars” due to the project rebid.

Constellis lost a bid on a \$338 million project for security services in Germany, and the DoD informed Constellis that a contract for security services at Camp Leatherneck, Afghanistan, would be terminating four months earlier than expected.<sup>4</sup>

Also, it became apparent that Constellis was at fault for the full amount (\$62.2 million) of the liability related to the DCAA audit.

In February 2014, Jason DeYonker of Forte Capital Partners (“Forte”) contacted Mr. Katis as a prospective buyer. Forte owned ACADEMI, which was one of Constellis’s primary competitors. Mr. DeYonker had become interested in acquiring Constellis after hearing of the 2013 ESOP transaction.

After some initial skepticism, Mr. Katis and the board decided that a sale to Forte was in the best interest of the company. Both sides expected to gain synergies through the transaction. The newly formed entity had an opportunity to become the leader in the industry.

Forte’s initial offer was \$230 million with none of the proceeds going to the ESOP. After some negotiation, Forte revised its offer to \$283.3 million with \$10 million in proceeds to the ESOP, as set forth in the March 24, 2014, letter of intent.

At the request of Forte, the sellers included the ESOP in the sales procedure. On March 25, Constellis again retained Wilmington to serve as the ESOP’s transactional trustee. The trustee retained the same parties to serve as its financial adviser and legal counsel.

In the coming weeks, the trustee concluded that the \$10 million offer was not sufficient consideration to provide to the ESOP. The offer from Forte was revised on May 5, 2014, to a total purchase price of \$288.3 million with \$20 million of those proceeds due to the ESOP.

The trustee’s financial adviser performed a fairness analysis for the proposed Forte sale transaction. The adviser’s analysis included certain adjustments to consider a controlling sale to a third-party analysis.

These changes included adjustments for:

1. the exclusion of the discount for lack of marketability,
2. the exclusion of the company-specific risk premium, and
3. the inclusion of tax benefits due to the ESOP structure.

The analysis included four scenarios based on (1) the amount of work performed under a customer contract and (2) the inclusion of ESOP tax benefits.

Based on this analysis, the trustee’s financial adviser stated that:

1. the total ESOP consideration is not less than fair market value of the equity interest held by the ESOP and
2. the terms and conditions of the transaction, taken as a whole, are fair to the ESOP from a financial point of view.

The trustee’s financial adviser provided its opinion on July 25, 2014.

Wilmington subsequently approved the transaction. The transaction resulted in the termination

of the ESOP just seven months after the ESOP was installed.

## Court Proceeding—The Constellis Litigation

The subject of the trial was whether the trustee satisfied an affirmative defense of Section 1108(e). According to the Constellis litigation opinion, “Wilmington has not demonstrated that its reliance on [the trustee’s financial adviser’s] report was ‘reasonably justified’ in light of all the circumstances because [Wilmington] has not shown that it thoroughly probed the gaps and internal inconsistencies of the report.”

The court reached this conclusion based on the trustee’s failure to:

1. review previous valuations of Constellis prepared by an independent appraiser,
2. probe the financial adviser’s reliance on management’s representations and projections,
3. investigate the appropriateness of a control premium, and
4. understand the impact of rounding on the value conclusion.

In addition to the valuation issues listed above, the court noted several trustee procedural issues.

## The McLean Group Valuation Report

The McLean Group performed annual valuations of a single share of Constellis stock over the three years prior to the ESOP transaction. The valuation reports were prepared (1) to price the company’s outstanding employee stock options and (2) to comply with financial reporting requirements.

The controlling equity value from the most recent valuation, which was performed as of January 31, 2013, was more than \$100 million lower than the controlling equity value estimated by the financial adviser as part of the ESOP transaction.

At trial, the defense experts explained that the valuation conclusions were different because (1) the reports were prepared for different purposes and (2) the performance of the macro economy and Constellis changed from December 2013 to July 25, 2014.

The court found these defense arguments unpersuasive. The failure of the trustee to understand the differences between the financial adviser’s analysis and the McLean Group analysis was a significant factor in the court’s decision.

## Reliance on Management’s Representations

For the ESOP transaction, the financial projections that the financial adviser relied on were prepared by company management. The management team that prepared the financial projections did not have an equity interest in the company.

However, as part of the transaction, the managers received a bonus equal to 5 percent of the overall purchase price. This bonus reflected a conflict of interest that was not documented by the trustee.

Additionally, the trustee did not review previous financial projections prepared by company management. Previously, Constellis management prepared projections for (1) the Vestar proposed transaction and (2) the McLean Group valuation analysis.

A review of previous projections would have revealed that Constellis management had previously only prepared one-year financial projections (as opposed to the five-year financial projections that were provided for the ESOP transaction).

## Customer Concentration

The trustee was deemed to have failed to understand how the Constellis customer concentration affected its value. In December 2013, two contracts accounted for 70 percent of the Constellis revenue. The trustee did not consult with either of the primary customers of Constellis (though Forte requested access to key customers and job sites during its due diligence).

At trial, the trustee explained that there is a different level of diligence between ESOP transactions and third-party acquisitions due to the representations and warranties provided in ESOP transactions that are not provided in third-party transactions.

The court took issue with this explanation because many of the representations and warranties in the 2013 ESOP transaction were provided by Constellis, not the sellers. Representations and warranties provided by Constellis could not benefit the ESOP.

## DCAA Audit

The court also noted that there was significant liquidity risk due to the terms of the DCAA audit indemnification. As of the ESOP transaction date, the DCAA liability of \$62 million was greater than the amount of cash on the Constellis books.

The terms of the DCAA indemnification provided for the amount collected under the DCAA claim to be offset with the seller debt. Therefore, the DCAA claim could result in an immediate liquidity issue for Constellis.

## Ownership Control Premium

The trustee was deemed to have no support for the 10 percent ownership control premium that the trustee's financial adviser applied in the 2013 ESOP transaction fairness analysis. The trustee was aware that the ESOP did not acquire a controlling ownership interest in the company.<sup>5</sup>

The financial adviser applied a 10 percent control premium to the guideline publicly traded company ("GPTC") method and performed the discounted cash flow ("DCF") method on a controlling basis.

The language in the valuation presentation regarding the ownership control premium was generic. The court found that the trustee's failure to question the appropriateness of the ownership control premium was "inexplicable."<sup>6</sup>

## Rounding

The court noted that the trustee failed to investigate the effects of rounding in the valuation. The court noted that the median per-share value indication was rounded up from \$4,232.50 to \$4,235.00.

The increase in the price from rounding provided a higher median value per share. The median value indication was relied on by the trustee in its negotiations.

## Procedural Issues

The trustee failed to investigate the motivations of Constellis and the sellers for establishing an ESOP, a criteria to determine an ESOP's eligibility under ERISA and the Internal Revenue Code ("Code"). The trustee did not review the ESOP pitch materials provided by the Constellis sell-side advisers and did not seek an opinion from trustee legal counsel regarding the eligibility of the plan.

The trustee was given an abbreviated time period to make its investment decision. The trustee was officially retained on October 25, 2013, and the purchase price range was approved on November 14, 2013. The only reason identified for this abbreviated time period was due to the tax benefits of approving the deal in calendar year 2013.

The frequency and timing of meetings suggested that the trustee was "not fully engaged." The transaction was discussed by the trustee's internal committee a total of three times, none of which exceeded 90 minutes.

One of the four voting members of the trustee committee missed two of the meetings. Only one meeting with Constellis management occurred, and the trustee was represented by only one member of its team at the meeting with Constellis management.

The court found that the trustee's negotiations were not representative of a prudent fiduciary. Specifically, the court questioned the trustee's prudence of beginning the negotiation process at \$3,900 per share, an amount *within* the fair market value range.

The court also speculated that the trustee's "lack of engagement and willingness to negotiate favorably with CSG may have been motivated by its significant business relationship with CSG, which refers more ESOP business to Wilmington than all other firms combined." Also, the trustee's familiarity with its advisers may have caused it to overlook certain aspects of the fairness analysis.

However, the court found that the trustee did not violate either Code Section 1106(b)(2) or Code Section 1106(b)(3).

## Constellis Litigation Damages Conclusion

The court distinguished the amount of damages incurred by the ESOP, as opposed to the damages attributable to the ESOP participants. The plaintiff's financial expert was the only expert to provide an opinion of damages. The plaintiff's financial expert calculated individual damages amounts based on certain inputs and methodologies utilized by the trustee's financial adviser in the original fairness analysis.

These certain items included the following:

1. The growth projections
2. The equity beta
3. The company-specific risk premium
4. The perpetual growth rate
5. The weighting applied to the valuation indications
6. The assumptions used to generate a controlling interest value
7. The GPTC method multiple selection
8. The dilution from the value of SARs
9. Rounding throughout the fairness analysis

The total amount of damages estimated by the plaintiff's expert was \$103,862,000.

The court considered the nine adjustments suggested by the plaintiff's financial expert and concluded total damages of \$29,773,250. The damages attributable to each of the nine inputs are presented in Exhibit 1.

The court adopted the damages indication provided by the plaintiff's financial expert for the



industry beta, control premium, and SARs. With regard to the reliance on management's growth projections, the court decided to cut the plaintiff's damage estimate of \$8.65 million in half because the court found that the plaintiff financial expert's "analysis was likely impacted by his incentive to work on behalf of the plaintiff."

The plaintiff's financial expert estimated damages of \$6.72 million for rounding and other damages. The court accepted the damages amount for rounding but concluded that the support for the "other" damages was underdeveloped.

The court rejected the plaintiff financial expert's damages calculations related to the company-specific risk premium, the perpetual growth rate, the weighting applied to the two valuation indications, and the GPTC multiple selection.

The concluded damages amount implies that the ESOP should have paid \$171,755,782.77, or \$3,609.33 per share, to purchase the Constellis stock, rather than the \$4,235 per share paid as part of the transaction.

## THE SJP LITIGATION

The *Perez v. First Bankers Trust Services, Inc.* (the "SJP litigation"), opinion was released on March 31, 2017. The litigation stemmed from a transaction that took place on April 16, 2007.<sup>7</sup>

The transaction involved the controlling shareholder of SJP selling a 38 percent interest in SJP to a newly formed ESOP. The ESOP paid \$16 million to Vincent DiPano, the selling shareholder, for the 38 percent interest.

Plaintiff asserted that First Bankers Trust Services, Inc. (the "trustee"), breached its fiduciary duties of loyalty and prudence to the SJP ESOP under ERISA Section 404(a)(1)(A) and (B) and engaged in a prohibited transaction under ERISA Section 406 when it authorized the ESOP to purchase the 38 percent interest in SJP.

The litigation was heard in the New Jersey District Court by Judge Michael A. Shipp. The case was tried over 17 days in May 2016.

Ultimately, the judge sided with the plaintiff, the Department of Labor, on behalf of the SJP ESOP, and awarded the SJP ESOP \$9,485,000 plus interest in damages. Damages were estimated based on the fair market value estimate proffered by the plaintiff's financial expert.

### Exhibit 1 The Constellis Litigation Judicial Determination of Damages Analysis Variables

Valuation-Related Damages Component	Concluded Damages
Reliance on Management's Growth Projections	\$ 4,325,000
Below-Industry Beta	2,936,000
Company-Specific Risk Premium of 1%	-
Perpetual Growth Rate of 3%	-
Valuation Indication Weighting	-
Control Premium	17,901,250
GPTC Pricing Multiple Selection	-
Dilution from SARs	1,611,000
Rounding Up	3,000,000
Total Damages	<u>29,773,250</u>

## Company Background

SJP was a closely held site preparation company with headquarters in New Jersey. The company was founded in 1959 by Carmen Yacuzzio. Mr. Yacuzzio was the company's primary shareholder until his death in 2004. The company provided a variety of site preparation services through its three subsidiaries.

Mr. DiPano assumed the CEO position following Mr. Yacuzzio's death. Mr. DiPano became the controlling owner of SJP in March 2005 when he acquired shares from Mr. Yacuzzio's trust.

SJP experienced significant revenue growth in 2005 and 2006 and achieved record revenue, gross profit, and earnings in 2006. The company's success coincided with the change in ownership.

The company marketed itself as the only vertically integrated site developer in the region.<sup>8</sup> Through its subsidiaries, the company had the capability to (1) clear a work site, (2) process refuse from the site, and (3) perform work on the site such as paving.

SJP also had a competitive advantage due to its mobile rock crushers. Its mobile rock crushers were the first of their kind in the United States, and they allowed SJP to work in rocky areas that were difficult for stationary rock crushers to develop.<sup>9</sup>

In 2006, approximately 60 percent of the SJP revenue generated was from one customer, Hovnanian Homes ("Hovnanian").

## ESOP Transaction

Prior to the transaction, Mr. DiPano held 70 percent of the SJP outstanding equity. The remaining

30 percent interest was held by Frank Dugan, who served as the SJP vice president. In early 2006, SJP retained a law firm to advise it on an ESOP installation transaction.

Shortly thereafter, SJP retained a sell-side financial adviser for the proposed ESOP transaction. SJP retained the trustee, and the trustee retained its own financial adviser and legal adviser. All parties were retained in the fourth quarter of 2006, and each party was represented at a meeting at company headquarters that occurred on November 15, 2006.

In January 2007, the SJP sell-side financial adviser issued a confidential information memorandum (“CIM”) to obtain third-party financing for the transaction. The CIM contained financial statement projections for 2007 to 2011. These projections included 0 percent revenue growth in 2007, 4 percent revenue growth in 2008, 8 percent revenue growth in 2010, and 6 percent revenue growth in 2011.

The sell-side financial adviser provided a copy of the CIM to the trustee’s financial adviser in early March 2007.

Representatives from the trustees’s financial adviser visited several SJP work sites on March 12, 2007. On March 13, 2007, bank financing in the form of a \$22.5 million credit facility was secured. The credit facility consisted of term loans totaling \$18.5 million and a \$4 million line of credit.

On April 11, 2007, the trustee’s financial adviser sent its draft valuation report to the trustee. The trustee’s financial adviser gave a presentation to the trustee on April 13, 2007.

In the analysis, the trustee’s financial adviser provided a fairness opinion. The purpose of the fairness opinion was to opine on whether the proposed transaction was fair to the ESOP from a financial point of view and whether the financing terms were reasonable.

The trustee’s financial adviser’s fairness opinion was dated April 16, 2007. The fairness opinion provided that (1) the consideration the SJP ESOP was paying as part of the transaction did not exceed fair market value and (2) the terms and conditions of the transaction were fair to the ESOP.

The trustee’s financial adviser relied on the DCF method and the GPTC method, placing even weighting on the value indications from the two methods. The trustee’s financial adviser’s DCF method conclusion for SJP was approximately \$36.1 million, and its market multiple conclusion for SJP was \$53.6 million.

The trustee’s financial adviser provided a range of fairness for the 38 percent interest of \$16.4 million to \$16.8 million—the fairness range was above the proposed purchase price of \$16 million.

On April 16, 2007, the ESOP transaction closed with the trustee accepting the \$16 million offer on behalf of the ESOP. The transaction closed with the same material terms as those proposed by the seller during the November 15, 2006, meeting. SARs were issued as a component of the transaction.

The trustee’s financial adviser issued a post-transaction valuation report on April 27, 2007. This report contained a final analysis of the transaction. This valuation report included industry and regional economy sections, which were notably absent from the April 11, 2007, draft valuation report.

Following the transaction, First Bankers Trust was retained to serve as the ESOP’s ongoing trustee. The trustee’s financial adviser was retained to provide annual valuation reports. First Bankers Trust served as the ESOP’s trustee until 2014.

## Court Proceedings

The allegations in the SJP litigation relate to the level of due diligence, or lack thereof, performed by the trustee. A significant portion of the plaintiff’s arguments made in court relates to the First Bankers Trust review of the valuation analysis.

There were also a number of fiduciary process items that were contested in court.

## Valuation Issues

The plaintiff’s financial expert raised a number of general issues with the analysis prepared by the trustee’s financial adviser.

These issues are summarized as follows:

1. Failure to understand SJP’s growth drivers
2. Failure to understand the nature of the company’s competitive advantages
3. Failure to understand the risk of the business (i.e., top customers)
4. Over-reliance on fiscal year 2006 financial results
5. Failure to incorporate results from the first quarter of 2007
6. Propensity to take material from SJP and sellers at face value

Both valuation methods utilized by the trustee’s financial adviser heavily relied on the 2006 financial results. SJP experienced significant growth in 2005 and 2006 and reported record levels of revenue, gross profit, and earnings before interest, taxes, depreciation, and amortization (“EBITDA”) in 2006.

Defendants understood that the success of SJP was due to the company’s (1) new bidding strategy

that was the result of the 2004 change in management, (2) vertical integration, and (3) use of mobile rock crushers. The plaintiff's financial expert argued that these advantages were not sustainable because none of the stated advantages were proprietary.

The plaintiff's financial expert critiqued the lack of diligence performed by the trustee and its financial adviser regarding SJP's top customers. Hovnanian accounted for approximately 60 percent of SJP revenue in 2006, and approximately 78 percent of its December 31, 2006, backlog was due to Hovnanian projects.<sup>10</sup>

The CIM stated that SJP had been "steadily diversifying away from Hovnanian."<sup>11</sup> The CIM statement appears contradictory to SJP's historical performance. The trustee and its financial adviser did not ask SJP management the following questions:

1. How does the company plan to diversify its customer base?
2. What is the potential impact of losing Hovnanian as a customer?

As of the transaction date, Hovnanian was a publicly traded company that was one of the largest home builders in the country. In its 2006 annual report, Hovnanian management characterized 2006 as a "challenging year for our company as we encountered a sudden downturn in many of our housing markets."<sup>12</sup>

The report also stated that Hovnanian planned to operate its business as if housing markets were in a prolonged downturn. Part of Hovnanian's tightening strategy involved "aggressively renegotiating with key partners" to reduce costs.<sup>13</sup>

The trustee and its financial adviser did not review the Hovnanian report in their review of the transaction.

SJP management told the trustee's financial adviser that the company's diversification plan was to add commercial and municipal developers. However, SJP management did not provide sufficient details regarding how it would diversify its business other than by offering services for a reasonable price and doing quality work.<sup>14</sup>

SJP also mentioned that its diversification plan included regional diversification, specifically entering the New York market. The trustee's financial adviser did not ask how the diversification plan would affect profit margins.<sup>15</sup>

Plaintiff's financial expert also argued that it was inappropriate to rely on the SJP 2006 results due to the cyclical nature of the homebuilding industry. The financial statement projections that the



trustee's financial adviser relied on used the 2006 financial results as the starting point for the five-year projection.

From the perspective of the trustee and its financial adviser, the projections appeared "conservative" due to:

1. the 0 percent projected growth in 2007;
2. the SJP backlog as of December 31, 2006; and
3. the moderate revenue growth throughout the remaining projected periods.

The company's 2006 financial results were (1) the starting point for the financial statement projections used in the trustee's financial adviser's DCF method and (2) the primary financial fundamental period used in the GPTC method.

The plaintiff's expert adjusted the projected financial statements downwards to "account for SJP's abnormally profitable year of 2006 and the peaks and troughs of a typical cycle."<sup>16</sup>

The plaintiff's expert criticized the trustee and its financial adviser for failing to consider the first quarter of 2007 results. The trustee's financial adviser reviewed the financial results for January and February 2007 as of the April 13, 2007, financial adviser presentation. However, the latest financial statements included in the draft valuation report were through December 31, 2006.

At the end of the fairness opinion presentation, the trustee requested that its financial adviser review the first quarter of 2007 financial statements. It is unclear whether the financial adviser reviewed the first quarter financial statements. The first quarter financial statements were not included in the "documents relied on" section of the draft valuation report dated April 11, 2007, or in the post-transaction valuation report dated April 27, 2007.

The SJP first quarter revenue decreased by 56.4 percent in 2007, from the first quarter of 2006.<sup>17</sup> Net income was negative in the first quarter of 2007. Given the negative first quarter performance, the question at hand was whether the company could make up for its losses from the first quarter of 2007 and meet its projections for the full year of 2007.

At trial, the trustee took the position that the negative results were based on bad weather in the first quarter of 2007. While there was some evidence to support this position, it appeared that there was a lack of contemporaneous due diligence on the first quarter results.

The trustee's financial adviser relied on financial statement projections prepared by the seller financial advisers. The trustee's financial adviser made some minor adjustments to the projected financial statements that resulted in a higher level of projected cash flow.<sup>18</sup>

According to the opinion, the trustee's financial adviser "assumed that the projections provided by SJP reflected SJP's best estimates," and it "did not undertake any independent analysis to verify whether the stated reasons supporting the projections were correct apart from reviewing updated financials and speaking with the company."<sup>19</sup>

Additional points of contention regarding the trustee's financial adviser work product included allegations that it:

1. copied and pasted large sections from the offering memorandum regarding SJP and
2. failed to assess potential litigation expenses from the Kara Homes bankruptcy.

The trustee's financial adviser included a 5 percent discount for lack of marketability. The discount for lack of marketability was not contested by the defendant's expert.

### DCF Method

The DCF method provides a value estimate using projected cash flow and a present value discount rate. The plaintiff raised several concerns about the projected cash flow and present value discount rate.

The cash flow critique was based on the trustee financial adviser's adoption of the projected financial statements provided by the sell-side financial adviser.

The trustee's financial adviser applied a present value discount rate of 18.25 percent to 19.25 percent to the projected cash flow. The trustee's financial adviser did not specify the amount of company-specific risk related to customer concentration.

The plaintiff's financial expert adjusted the cash flow projection by applying a negative 15 percent revenue growth rate in 2007, followed by a constant revenue growth rate of 5 percent.

The plaintiff's financial expert also set the projected EBITDA margin to the five-year historical average EBITDA margin. The plaintiff's financial expert applied a 20 percent discount rate to projected cash flow. This resulted in a value indication from the DCF method of approximately \$13.9 million.

### GPTC Method

In the transaction analysis, the trustee's financial adviser placed 50 percent weight on the GPTC method. The trustee's financial adviser selected the following guideline publicly traded companies: Fluor, Perini, Jacobs Engineering Company, Granite Construction Inc., Meadow Valley Corp., URS, and Sterling Construction.

The trustee's financial adviser relied on earnings before interest and taxes ("EBIT"), EBITDA, and revenue pricing multiples to estimate value using the GPTC method. The trustee's financial adviser decreased the indicated pricing multiples by 40 percent to adjust for differences in size, access to capital, geographic diversity, and economies of scale.<sup>20</sup>

The trustee's financial adviser did not consult with SJP management when it selected the guideline companies.<sup>21</sup>

The plaintiff's financial expert disagreed with the trustee financial adviser's selected guideline companies, stating that the peer group was incomparable due to, among other things, their lack of exposure to the housing market. The plaintiff's expert relied on 18 guideline companies from the homebuilding industry in his analysis.

The plaintiff's expert also relied on pricing multiples based on five-year average historical financial fundamentals—as opposed to financial fundamentals from 2006. The five-year historical average financial fundamentals were selected to adjust for the cyclical nature of the industry and to normalize the SJP "abnormally strong performance" in 2006. The value indication from the plaintiff expert's GPTC method was approximately \$13.9 million.<sup>22</sup>

### **Trustee Procedural Issues**

As a fiduciary, the trustee made key decisions through its employee benefit committee. As of the transaction date, the employee benefit committee consisted of eight or nine members. The committee members played various roles with regard to new engagements.



Typically, a salesperson would receive a 20 percent commission on new business brought in and an additional 20 percent commission on fees generated in the first year that the First Bankers Trust was retained to serve as the plan's ongoing trustee.

For the SJP ESOP transaction, the salesperson was designated as the "team leader." She was the only member of the trustee's Trust team to participate in the due diligence meeting with SJP. In fact, she was the only one to communicate directly with SJP management throughout the ESOP transaction.<sup>23</sup>

A second team member was assigned to the SJP transaction. However, she "wasn't necessarily there every step of the way."<sup>24</sup>

There was confusion among the members of the employee benefits committee as to which member(s) were responsible for reviewing financial documents and understanding the valuation report. No members reviewed or received the SJP audited financial statements prior to the transaction.<sup>25</sup> Additionally, no member assigned to the SJP transaction had valuation expertise.

The trustee's valuation review was criticized by plaintiff due to the condensed time period allowed to review the report. The draft report was provided on April 11, 2007, for a presentation on April 13, 2007. The transaction was then scheduled to close on the next business day, April 16, 2007.

The trustee repeatedly deferred to its financial adviser. The team leader stated that she "felt comfortable with [the financial adviser's] projections because [the financial adviser] felt comfortable about the projections."<sup>26</sup>

The trustee also did not independently review the accuracy of the financial information that SJP provided to the financial adviser.

## Legal Positions

The plaintiff claimed that the trustee failed to meet its duty of loyalty and duty of prudence to the ESOP, which resulted in a prohibited transaction.

### Duty of Prudence

The plaintiff argued that defendant breached its duty of prudence by failing to:

1. follow up on the errors and inconsistencies in the draft valuation report,
2. independently verify material information,
3. ensure that the draft valuation report was reliable, and
4. employ an adequate review process.<sup>27</sup>



The defendant argued that it maintained its duty of prudence by obtaining the advice of a financial expert. The defendant was then able to make its own decision based on the financial expert's advice.

### Duty of Loyalty

The plaintiff asserted that the defendant was biased because it sought retention as the ESOP's ongoing trustee upon completion of the transaction. The plaintiff supported this position based on First Bankers Trust (1) accepting, without verification, the seller's representations and (2) failing to negotiate the purchase price.

The defendant argued that it did not breach its duty of loyalty because it "verified all information" and ensured the information was complete. Also, the defendant stated that there was no information that it "should have considered, but did not." The defendant argued that it was not required to negotiate, especially in this instance when the offer price was below fair market value.

### Prohibited Transaction

The plaintiff argued that the defendant was prohibited from causing the ESOP to enter the transaction because the transaction price was above fair market value. The plaintiff's financial expert concluded that the fair market value of the interest in SJP was \$6,515,000. The plaintiff also argued that the bank financing did not support the fair market value of the interest.

The defendant argued that the ESOP paid at or below fair market value for the interest in SJP based on the First Bankers Trust financial adviser's analysis. The defendant also argued that the plaintiff expert's valuation analysis "improperly considered SJP's performance in hindsight" and was not credible.<sup>28</sup>

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## “According to the court, the cumulative issues . . . demonstrate that the trustee failed to fulfill its duty of prudence under ERISA.”

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### Indemnification

The defendant asserted that the indemnification clauses in the stock purchase agreement indemnified the ESOP against damages related to flawed or inaccurate information provided by the seller.

The plaintiff argued that the indemnification provisions did not provide a safe harbor for the fiduciary against all material representations, but rather, the provisions only protect against false information that the seller knowingly provided.

### Loan Forgiveness

The defendant communicated that sometime after the transaction, SJP forgave \$9.6 million of the loan to the ESOP. Defendant proposed that the loan forgiveness should lower the purchase price commensurately.

In response, the plaintiff stated that (1) the write-down of the loan did not retroactively adjust the proceeds paid to Mr. DiPano and (2) the argument should not be considered because the loan documents and loan forgiveness documents were not entered into evidence.

### SJP Conclusions

#### Duty of Prudence

The court found that the trustee breached its duty of prudence by failing to make an honest, objective assessment of the valuation report and by failing to understand and question the methods and assumptions underlying the valuation analysis.<sup>29</sup>

The court cited the *Chesemore v. All. Holdings, Inc.*, opinion, stating “[employing] a financial advisor is evidence of adequate investigation . . . reliance on experts is not a shield—it is ‘but a single factor to be weighed in determining whether a fiduciary has breached [its] duty.’”

In this instance, the trustee relied on information provided by its financial adviser, who in turn relied entirely on information provided by the seller and its advisers.

The court determined that the indemnification did not preclude the trustee from conducting an independent inquiry into the information provided by the seller and SJP.

The court noted several “glaring issues” regarding the trustee’s opinion to enter the transaction. These issues are as follows:

- A prudent investor would not enter into a transaction with a valuation report that lacked regional economy and industry sections.
- A prudent investor would question the differences between the projected EBITDA from the CIM and the projected EBITDA that was relied on in the trustee financial adviser’s analysis.
- A prudent investor would question the “verbatim copying-and-pasting” by the trustee’s financial adviser and the financial adviser’s “blanket adoption” of the seller financial adviser’s position.
- The trustee failed to question and follow up with its financial adviser about obvious errors in the valuation report.
- There was a failure to inquire about critical assumptions in the draft valuation report.<sup>30</sup>

The trustee’s fiduciary review process for the transaction was also deficient. The trustee received the draft valuation report with insufficient time to review the report. The trustee’s team lead was the only individual from the trustee team who met with SJP management, and she (1) lacked financial expertise and (2) failed to take notes at the meeting.

There was miscommunication among the team regarding who was responsible for reviewing the company’s financials and the valuation report. The trustee’s failure to negotiate the transaction price was evidence of a flawed fiduciary process.

According to the court, the cumulative issues listed above demonstrate that the trustee failed to fulfill its duty of prudence under ERISA.

#### Duty of Loyalty

The court found that the trustee breached its duty of loyalty to the ESOP. The primary reasons for this conclusion was due to the trustee’s failure to:

1. conduct an adequate amount of due diligence,
2. negotiate the purchase price, and
3. conduct the transaction at arm’s length as evidenced by the adoption of seller’s representations.

## Prohibited Transaction

Based on the evidence presented, the court ruled that the trustee failed to meet its burden of proof that the transaction price represented adequate consideration at fair market value. Therefore, the trustee caused the ESOP to enter a prohibited transaction.

## Remedies

The defendant made an argument that the purchase price should be adjusted for the \$9.6 million in loans for which SJP subsequently forgave the ESOP. Therefore, the purchase price would be \$6.3 million. The court found that the case law did not support defendant's position.

The court determined that the appropriate damages amount was the amount that the SJP ESOP paid in excess of fair market value. The court adopted the plaintiff expert's fair market value estimate of \$6,515,000, which resulted in damages of \$9,485,000. This amount, plus interest, was awarded to the SJP ESOP.

The plaintiff also sought injunctive relief to permanently prohibit the trustee from serving as a fiduciary to an ERISA-covered plan in the future. The court determined that the trustee's conduct did not warrant the requested injunctive relief.

## CONCLUSION

The Constellis litigation opinion and SJP litigation opinion detail the fiduciary process and, particularly, the fiduciary review of the valuation analysis for the subject ESOP installation transactions.

Consideration of these judicial opinions should prove useful both for prospective ESOP companies—and for ESOP practitioners—implementing successful future ESOP installation transactions.

### Notes:

1. Brundle, on Behalf of Constellis Employee Stock Ownership Plan v. Wilmington Trust N.A., No. 1494, 2017 WL 979106 (U.S. Dist. Ct. E.D.Vir., March 13, 2017).
2. It is important to note that the final Stock Purchase Agreement included certain representations and warranties that were guaranteed by Constellis and not the sellers.
3. Brundle v. Wilmington Trust, 2017 WL 979106 at \*9.
4. Id. at \*13.
5. Control was given to the Class A warrant holders for a period of 10 years following the transaction close date. After the 10-year period, the ESOP would hold a controlling interest in the company.

6. Brundle v. Wilmington Trust, 2017 WL 979106 at \*22.
7. Perez v. First Bankers Trust Services, Inc., No. 12-4450, 2017 WL 1232527 (U.S. Dist. Ct. D.N.J. Mar. 31, 2017).
8. Perez v. First Bankers Trust, 2017 WL 1232527 at \*26.
9. Id. at \*35.
10. Id. at \*47.
11. Id. at \*13.
12. 2006 Hovnanian Annual Report, 1.
13. Ibid., 3.
14. Perez v. First Bankers Trust, 2017 WL 1232527 at \*49.
15. Id. at \*50.
16. Id. at \*65.
17. Id. at 40.
18. Id. at \*29.
19. Id. at \*30.
20. Id. at \*53.
21. Id. at \*54.
22. Id. at \*64.
23. Id. at \*6.
24. Id.
25. The only financial document received by the trustee was the financials presented in the CIM.
26. Perez v. First Bankers Trust, 2017 WL 1232527 at \*30.
27. Id. at \*66.
28. Id. at \*70.
29. Id. at \*73.
30. These assumptions included failure to verify the SJP historical growth drivers; failure to understand the assumptions in the financial statement projections; failure to independently verify critical facts, such as backlog; failure to raise issues regarding industry cyclicality; failure to understand competitive advantages; failure to consider the SJP poor performance in the first quarter of 2007; and failure to consider SJP's customer concentration.

**"[T]he trustee failed to meet its burden of proof that the transaction price represented adequate consideration at fair market value."**

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## *Best Practices Discussion*

# Shareholder/Executive Reasonableness of Compensation—Practical Guidance

Casey D. Karlsen and Lisa H. Tran

*C corporations and S corporations should pay shareholder/executive compensation based on the fair market value of the executive services rendered—or risk being audited and possibly penalized by the Internal Revenue Service. Forensic analysts can help companies determine reasonable shareholder/executive compensation using free or fee-based compensation data, with consideration of statutory authority and judicial precedent. This discussion (1) summarizes the federal income tax statutes and judicial precedents related to shareholder/executive compensation, (2) provides a list of frequently relied upon executive compensation data sources, and (3) reviews important issues presented in recent judicial decisions regarding shareholder executive compensation.*

## INTRODUCTION

In general, overcompensation of shareholder/executives is a common federal income tax issue, particularly for closely held C corporations. Executive compensation is a deductible business expense, and it reduces the amount of income taxes paid on a company's taxable income.

Dividends paid to shareholders are not deductible for federal income taxes purposes. This fact encourages some closely held companies to overcompensate their shareholder/executives.

On the other hand, S corporations, in particular, may undercompensate shareholder/executives. This is because compensation is subject to federal and state payroll taxes and dividends and distributions are not. Due to the significant increase in the number of S corporations today, the Internal Revenue Service (the "Service") is investing more effort into reviewing the reported shareholder/executive compensation of closely held S corporations.

In recent years, shareholder/executive compensation was heavily scrutinized by the Service and by the Tax Court, and many disputes have resulted in litigation. Whether shareholder/executive compensation is overpaid or underpaid, reasonable compensation should be determined based on the fair market value of the services rendered. Because

determining reasonable shareholder/executive compensation can be a challenging task, the retention of an independent forensic analyst ("analyst") may be necessary.

This discussion (1) summarizes the federal tax statutes and historical judicial precedents related to shareholder/executive compensation that are commonly relied upon by analysts and the Service to estimate reasonable compensation, (2) provides a list of frequently relied upon sources of executive compensation data, and (3) reviews important issues presented in recent judicial decisions regarding shareholder/executive reasonable compensation.

## LEGISLATIVE AND JUDICIAL GUIDANCE

To determine the reasonableness of shareholder/executive compensation, analysts should consider both statutory authority and judicial guidance. Internal Revenue Code Section 162(a) provides that executive compensation is deductible as a business expense if it is:

1. reasonable in amount and
2. based on the services actually rendered.

For shareholder/executive compensation to qualify as reasonable employee compensation, Treasury Regulation 1.162.7 lists the following four requirements. Shareholder/executive compensation should be:

1. an ordinary and necessary expense,
2. reasonable in amount,
3. based on services actually rendered, and
4. actually paid or incurred by the tax payer corporation.

Judicial precedent also provides guidance related to reasonableness of executive compensation. Factors to consider in determining the reasonableness of shareholder/executive compensation were first presented by the Court of Appeals for the Sixth Circuit 68 years ago in the *Mayson Manufacturing Company v. Commissioner*<sup>1</sup> decision. The *Mayson* decision listed eight factors that should be evaluated in determining the reasonableness of compensation paid to a shareholder/executive.

In 1996, the Tax Court expanded the *Mayson* factors in *Pulsar Components International, Inc. v. Commissioner*<sup>2</sup> to include the following:

1. The employee's qualifications
2. The nature, extent, and scope of the employee's work
3. The size and complexities of the employer's business
4. A comparison of salaries paid with the employer's gross and net income
5. The prevailing general economic conditions and the background of the industry
6. A comparison of salaries with distributions to officers and retained earnings and the employer's dividend history
7. The prevailing rates of compensation for comparable positions in comparable concerns
8. The salary policy of the employer as to all employees
9. The amount of compensation paid to the particular employee in previous years
10. The employer's financial condition
11. Whether the employer and employee dealt at arm's length
12. Whether the employee guaranteed the employer's debt
13. Whether the employer offered a pension plan or profit-sharing plan to its employees
14. Whether the employee was reimbursed by the employer for business expenses that the employee paid personally

In the *Trucks, Inc. v. U.S.*<sup>3</sup> decision, some of the factors considered regarding the shareholder employee in determining the reasonableness of shareholder/executive compensation included the following:

1. Training and qualifications
2. Responsibilities and number of hours worked
3. Results of employee's efforts
4. Ratio of compensation to company growth (before salaries and tax)
5. Absence of fringe benefits available to executives in comparable companies
6. Responsibility for inception and/or success
7. Correlation between compensation and ownership interest

Additionally, the federal courts have increasingly relied on the independent investor test in reasonable compensation disputes. The Tax Court first illustrated the independent investor test in 1984 in the *Elliotts, Inc. v. Commissioner*<sup>4</sup> decision.

In the independent investor test, the Tax Court considered whether an independent investor would pay the shareholder/executive the same compensation he or she was receiving from the company. The Tax Court based its independent investor consideration on the actual rate of return on owner's equity for the subject company—compared to a market-derived required rate of return on owner's equity.

## EXECUTIVE COMPENSATION SOURCES

In addition to reviewing federal statutes and judicial guidance, the expert witness can estimate reasonable compensation by analyzing compensation data for job positions at comparable companies.

This is important since the Tax Court has indicated that it favors the use of market-based data to determine reasonable compensation, whereby the shareholder/executive compensation in question is compared to the market-based compensation of an executive performing similar job responsibilities at a similar company.

The analyst can find a variety of compensation information available to estimate market-based executive compensation. Determining which sources to use will depend on whether a particular source provides compensation for a specific industry or a specific job title and the price of the source (some compensation databases are free and some may cost thousands of dollars). Some sources provide base

salaries while some sources provide total compensation, including salaries and benefits.

A sample list of commonly used compensation sources are discussed below:<sup>5</sup>

1. **Economic Research Institute (“ERI”).** ERI offers salary and other data for more than 7,000 positions in more than 8,000 locations for a fee. ERI offers information such as base salary, total compensation, and annual incentives for each job position. The valuation analyst can search the ERI database by city, state, job title, Standard Industrial Classification (“SIC”) code or North American Industry Classification System (“NAICS”) classifications, date (historical information available), and company revenue.

The analyst can obtain compensation data in the 10th percentile, 25th percentile, 50th percentile, 75th percentile, and 90th percentile.

2. **Willis Towers Watson Data Services.** Willis Towers Watson, a compensation and benefits consulting company, publishes and offers (for a fee) several different compensation surveys.

The surveys provide information such as salaries, short-term incentives, sales incentives, overtime policies, deferred compensation for executives, and turnover rates.

3. **Bureau of Labor Statistics (“BLS”).** Providing a free online source of salary information, BLS is a division of the U.S. Department of Labor. BLS offers salary information by occupation, region, state, and cities.

BLS also publishes reports on benefits and employer compensation costs. Some data on the BLS website are available historically as well.

4. **Salary.com.** Salary.com is a website that contains several databases and provides salary information regarding 4,200 jobs. The data have been gathered from surveys of human resources personnel.

The information is updated monthly. Some of the databases are subscription based. One database is free but does not include much detail and is only available on a current basis.

These executive compensation data provide the analyst with a starting point for assessing reasonable compensation that should be supported by company-specific factors. For example, the analyst may consider the number of hours

worked, job title, and related responsibilities of a shareholder/executive. It may be reasonable to pay an executive working 80 hours a week and performing several significant job functions compensation in the 90th percentile.

Additionally, the analyst may consider whether a company is profitable or unprofitable. If the subject company is unprofitable, a shareholder/executive compensated at the high end of the salary range may be overcompensated.

## RECENT JUDICIAL DECISIONS

The following discussion summarizes recent judicial decisions, which emphasize the importance of (1) retaining an independent, qualified analyst to estimate shareholder/executive compensation and (2) considering the independent investor test and other factors introduced in prior judicial decisions regarding the estimation of reasonable shareholder/executive compensation.

### H.W. Johnson, Inc. v. Commissioner

In *H.W. Johnson, Inc. v. Commissioner*,<sup>6</sup> the Tax Court considered five relevant factors and concluded that the compensation paid by a concrete contracting business (“H.W. Johnson”) to two shareholder executives in 2003 and 2004 was reasonable and, therefore, deductible under Internal Revenue Code Section 162(a).

H.W. Johnson was incorporated in 1974 by H.W. and Margaret Johnson. Their sons, Bruce and Donald Johnson, began working for H.W. Johnson as teenagers in the 1970s and began working full time upon completion of their education. Beginning in 1993, Bruce and Donald assumed responsibility of the daily operations of H.W. Johnson, including contract bidding and negotiation, project scheduling and management, personnel management, and customer relationships.

In 1996, H.W. retired, and Bruce and Donald each acquired a 24.5 percent ownership interest in H.W. Johnson. Margaret retained ownership of the remaining 51 percent interest. At that time, Bruce and Donald assumed the vice president role and, together with Margaret, constituted the board of directors of H.W. Johnson.

H.W. Johnson revenue increased rapidly from the management of Bruce and Donald from approximately \$3.9 million in 1993 to \$23.8 million and \$38.0 million in 2003 and 2004, respectively. During the years in question (2003 and 2004), H.W. Johnson was one of the largest sidewalk, curb, and gutter concrete contractors in Arizona, employing approximately 200 people.

During the years in question, Bruce and Donald worked 10 to 12 hours per day for five to six days per week. H.W. Johnson had an excellent reputation and was known for delivering a quality and timely work product. The concrete work supervised by Bruce and Donald required technical skill and coordination. If the wet concrete reached 90 degrees it would “set,” and keeping concrete at a low temperature was challenging in the hot climate of Phoenix, Arizona.

H.W. Johnson compensated Bruce and Donald a total of \$4.0 million in 2003 and \$7.3 million in 2004. Compensation was based on an officer’s bonus formula structured as a tiered percentage of revenue.

Upon review of the H.W. Johnson income tax returns for 2003 and 2004, the Service issued a notice of deficiency stating that the officers’ compensation deductions exceeded reasonable compensation by \$2.6 million and \$5.6 million in 2003 and 2004, respectively.

The Service subsequently changed its position and stated that the officers’ compensation exceeded reasonable compensation limits by \$811,000 and \$769,000 in 2003 and 2004, respectively. H.W. Johnson petitioned the U.S. Tax Court for review.

According to the decision, “The Court of Appeals for the Ninth Circuit . . . applies five factors to determine the reasonableness of executive compensation . . .”:

1. The role of employees in the company
2. A comparison of compensation paid by similar companies for similar services
3. The character and condition of the company
4. Potential conflicts of interest
5. The internal consistency of compensation arrangements<sup>7</sup>

The Tax Court separately analyzed and discussed each of these five factors to determine whether the aforementioned compensation paid to Bruce and Donald was reasonable.

### **Factor #1: The Role of Employees in the Company**

The first factor is used by the Tax Court to identify whether the recipient is integral to the success of a company. This factor considers the role of the employee with regard to the position, duties performed, and hours worked.

The Tax Court noted that Bruce and Donald were responsible for contract billing, onsite management and personnel supervision, and equipment modifi-

cations. Bruce and Donald were known to have a hands-on management style, through which annual revenue increased from approximately \$3.9 million to over \$38.0 million in 11 years.

The Tax Court indicated that the evidence presented with regard to the first factor supported the reasonableness of the disputed compensation.

### **Factor #2: Comparison of Compensation Paid by Similar Companies for Similar Services**

The second factor is used to provide an indication of an officer’s compensation within a particular industry. The Service acknowledged that the performance of Bruce and Donald was so superior to the performance of executives employed by other companies that a meaningful comparison was not possible.

Therefore, the Tax Court concluded that this factor was neutral with regard to the reasonableness of the disputed compensation.

### **Factor #3: Character and Condition of the Company**

The third factor focuses on the size and complexity of the company as well as the economic conditions affecting it. The Tax Court noted that the H.W. Johnson revenue, profit margins, and total assets had increased significantly from the management by Bruce and Donald.

The Tax Court indicated that the third factor supported the reasonableness of the disputed compensation.

### **Factor #4: Potential Conflicts of Interest**

The fourth factor refers to the independent investor test. As previously discussed, the independent investor test evaluates the reasonableness of shareholder/executive compensation from the perspective of a hypothetical independent investor who would demand a reasonable return on equity (“ROE”) after payment of the disputed compensation.

The Tax Court recognized that this factor required particular scrutiny as the controlling shareholder, Margaret, was the mother of Bruce and Donald. The Service and H.W. Johnson both retained expert witnesses to support their positions.

The expert witness retained by the Service analyzed ROE ratios using four sources. The Service expert witness calculated the ROE of seven guideline publicly traded companies.

However, the Tax Court found that the seven guideline publicly traded companies were not sufficiently comparable. This is because these companies:



1. were publicly traded while H.W. Johnson was privately owned,
2. operated in different industries than H.W. Johnson, and
3. generated significantly higher revenue than H.W. Johnson.

The second source that the Service expert witness relied on to calculate ROE was the Risk Management Association (“RMA”). However, for the purposes of this case, the Tax Court found that the RMA data were unreliable because RMA stated that its data should be only used as “general guidelines and not as industry norms.” Additionally, RMA stated that the data may include small sample sizes for certain industries.

Third, the Service expert witness calculated ROE based on the Construction Financial Management Association annual financial survey. Likewise, the Tax Court found that these data were not comparable, because many of the companies in the data sample operated in dissimilar industries.

Fourth, the Service expert witness relied on ROE ratios published by Ibbotson Associates. The Tax Court also found that these data were not comparable, because many of the companies in this data set operated within the concrete industry as a whole, and not specifically the concrete contracting sector.

The H.W. Johnson expert witness relied on ROE data from Integra Information (“Integra”) for 33 companies that (1) were classified in SIC code 1771, concrete work, and (2) generated revenue between \$25 million and \$50 million.

The H.W. Johnson expert witness calculated an average pretax ROE of these 33 companies of 10.5 percent and 10.9 percent in 2003 and 2004, respectively.

The Tax Court determined that the companies used by Integra to calculate ROE ratios were sufficiently similar to H.W. Johnson. Further, the Tax Court found that the average pretax ROE from these companies was reasonably similar to the average pretax ROE for H.W. Johnson of 10.2 percent and 9.0 percent in 2003 and 2004, respectively.

The Tax Court ruled that the H.W. Johnson ROE (1) was comparable to the industry average ROE and (2) would satisfy a potential investor.

Accordingly, the Tax Court concluded that the fourth factor supported the reasonableness of the disputed compensation.

## Factor #5: Internal Consistency of Compensation Arrangements

The fifth factor refers to whether the disputed compensation was paid in adherence with a structured, formal, and consistently applied compensation program.

That is, application of the fifth factor considers whether compensation is awarded based on (1) clearly stated criteria or (2) ambiguous or undocumented criteria that may allow taxpayers to utilize compensation structures to achieve other goals such as minimizing tax implications.

The disputed compensation paid to Bruce and Donald was a consistently applied, structured, and formal officer’s bonus formula. Accordingly, the Tax Court ruled that the fifth factor supported the reasonableness of the disputed compensation.

In summary, based on consideration of the five factors discussed above, the Tax Court concluded that the compensation paid by H.W. Johnson to Bruce and Donald in 2003 and 2004 was reasonable and, therefore, deductible under Section 162(a).

## Transupport, Incorporated v. Commissioner

In *Transupport, Incorporated v. Commissioner*,<sup>8</sup> the Tax Court considered the reasonableness of compensation paid to the shareholder president of Transupport, Incorporated (“Transupport”), and his four shareholder sons. The Tax Court ultimately rejected the analysis of one compensation expert in this case due to the perceived lack of independence and objectivity in his analysis.

Transupport was founded in 1972 by Harold Foote. Transupport purchases aircraft engines and engine parts from the government in bulk quantities and resells them for use in helicopters, airplanes, and tanks.

On August 8, 2005, Harold transferred 2,250 shares of Class B nonvoting common stock to each of his four sons—William, Kenneth, Richard, and Jeffrey (collectively, the “Sons”). After this transfer, Harold owned all of the Class A voting common stock and the Sons owned all the Class B nonvoting common stock.

Harold and the Sons were the only full-time employees



of Transupport from 2006 to 2008, which are the years in dispute. Harold was the president and chief executive officer of Transupport. The Sons performed overlapping duties related to the operation of Transupport. The Tax Court noted that some of the duties could have been performed by lower-level employees.

Compensation for Harold was \$353,211 in 2006, \$478,993 in 2007, and \$599,858 in 2008. From 1999 through 2008, each of the Sons was compensated equally. Compensation for each of the Sons was \$575,000 in 2006, \$675,000 in 2007, and \$720,000 in 2008.

Harold compensated each of the Sons equally to avoid preferential treatment, and he did not consult any independent consultants to determine their compensation.

In 2007, Harold began soliciting potential purchasers of Transupport and entered into a nondisclosure agreement with Richard Lodigiani of BTS New England, Inc. Lodigiani prepared a confidential offering memorandum and distributed it to several potential purchasers.

The confidential offering memorandum included a recast financial summary that stated, “Five shareholder salaries recast to market rate of \$50,000 annually each.” Additionally, it discussed gross profit expectations and inventory values that were notably different than the financial performance indicated on the Transupport income tax returns.

The confidential offering memorandum was distributed to potential purchasers, including Peter LaHaise. LaHaise then provided the confidential offering memorandum and recast financial summary to the Service through the IRS Whistleblower Office and sought a \$13 million whistleblower award.

On January 20, 2009, the Service began an audit of the Transupport income tax return for 2006 and 2007. In October 2009, the audit was expanded to include income tax returns for 1999 through 2005.

In the Tax Court’s prior decision,<sup>10</sup> it held that deficiencies determined from 1999 through 2005 were barred by the statute of limitations because the Service failed to prove that underpayments from 1999 through 2005 were due to fraudulent intent.

The Service retained a forensic analyst to provide a reasonable compensation analysis to support the audit. The forensic analyst did not interview the Sons. His investigation included a review of the following:

1. Transupport 2006 income tax return
2. Resumes of the Sons
3. A general description of the business

His analysis was based on data from ERI. The Service forensic analyst relied on the NAICS code provided in the Transupport 2006 tax return, which was 423990, Other Miscellaneous Durable Goods Merchant Wholesalers, within the heading “Wholesale Trade.” The forensic analyst then refined his search to include only aircraft parts manufacturers.

The Service forensic analyst concluded a reasonable compensation for the Sons in 2006 based on the median compensation provided by ERI. He concluded that reasonable compensation in 2006 was \$250,000 for Richard (one of the Sons) and \$225,000 for each of the other Sons. To estimate reasonable compensation in 2007 and 2008, he increased the compensation in 2006 by 3 percent per year.

Additionally, the forensic analyst concluded that compensation for Harold was reasonable in 2006, and he normalized salary increases to 3 percent per year in 2007 and 2008 for Harold.

The Tax Court noted that the companies selected by the Service forensic analyst (i.e., aircraft parts manufacturers) did not include any wholesalers such as Transupport.

Transupport petitioned for a redetermination of income tax deficiencies and penalties arising from the aforementioned adjustments to employee compensation. Transupport retained a forensic analyst to perform a reasonable compensation analysis.

The Transupport forensic analyst also relied on a single database that included manufacturers rather than wholesalers. He estimated reasonable compensation at the 90th percentile of the selected compensation data set.

The Tax Court noted that the compensation analysis performed by the Transupport forensic analyst was flawed because his analysis aimed to “validate and confirm that the amounts reported on [the Transupport] tax returns were correct” rather than to estimate reasonable compensation.<sup>11</sup> That is, the forensic analyst acted as an advocate rather than as an independent consultant.

Additionally, the Tax Court noted that the forensic analyst (1) only considered one database and (2) relied on compensation at or near the high end of the data set—despite the Sons’ lack of the relevant skills to perform the duties successfully.

In trial, the Service did not rely on the forensic analyst that it initially had retained, but instead retained a second compensation analyst.

The second forensic analyst of the Service relied on compensation data for wholesalers rather than manufacturers. He performed five different analyses based on five databases and relied on the median

of the compensation data. He concluded that the salary paid to Harold was reasonable because it approximated the median of the selected databases. However, the Service forensic analyst did not discretely estimate the Sons salaries.

Due to the overlapping duties of the Sons, the second forensic analyst estimated one single compensation total for Harold and the Sons. He concluded a reasonable level of compensation that was lower than the amounts indicated in the notice of deficiency.

In summary, the Tax Court found that compensation analyses from the forensic analysts for the Service were flawed. The Tax Court noted that the second forensic analyst did not separately estimate compensation for Harold, which decreased the credibility of his analysis—if compensation for Harold was removed from the estimated total compensation, the remaining compensation for the Sons would actually decrease from 2006 to 2008.

The indicated decrease in compensation was contrary to the actual financial performance of Transupport, weakening the credibility of the conclusions of the second forensic analyst. That is, the residual compensation for the Sons (after removing compensation for Harold) decreased from 2006 to 2008 while sales had increased for the company.

Further, the Service forensic analysts did not interview Harold and his Sons as part of the engagement, which was another weakness noted by the Tax Court.

The Tax Court found that the reasonable compensation analyses performed by the Transupport forensic analyst lacked objectivity and independence.

The Tax Court stated, “In most cases, as in this one, there is no dispute about the qualifications of the experts. The problem is created by their willingness to use their resumes and their skills to advocate the position of the party who employs them without regard to objective and relevant facts, which is contrary to their professional obligations.”<sup>12</sup>

The Tax Court also noted, “An expert is not helpful to the court and loses credibility when giving testimony tainted by overzealous advocacy.”<sup>13</sup>

Despite the acknowledged flaws, the Tax Court concluded that the approach of the first forensic analyst for the Service was rational and not arbitrary. Therefore, the Tax Court concluded that reasonable compensation for Harold and his Sons was equal to the amounts indicated in the notice of deficiency.

## Brinks Gilson & Lione v. Commissioner

In *Brinks Gilson & Lione, a Professional Corporation, v. Commissioner*,<sup>14</sup> the Tax Court

applied the independent investor test to test the reasonableness of compensation paid in the form of year-end bonuses to shareholder attorneys, which reduced reported income to \$0.

The Tax Court disallowed a portion of the disputed compensation and held Brinks Gilson & Lione (“BGL”) responsible for an accuracy-related penalty related to the underpayment of income taxes resulting from the overpayment of shareholder attorney compensation.

BGL is an intellectual property law firm organized as a corporation. It is based in Chicago, Illinois. During the years in question (2007 and 2008), it employed approximately 150 attorneys and an additional staff of 270 employees. Approximately 65 of the attorneys were shareholders.

At BGL, shareholder attorneys acquire their equity shares at a price equal to book value. And, upon termination of employment, shareholder attorneys are required to sell their shares back to the firm at a price equal to book value.

At the end of each year, shareholder attorneys receive a bonus. During the years in question, BGL reported the bonuses as part of employee compensation in the preparation of its tax returns. Total shareholder attorney bonuses were \$9.0 million and \$13.7 million in 2007 and 2008, respectively.

The Tax Court indicated that it was the intent of the board of directors of BGL that the sum of the shareholder attorneys’ bonuses exhausts book income. That is, total expenses were intended to exactly equal revenue, and book income was intended to be \$0.

BGL shareholder attorneys also are entitled to receive dividends. However, for at least the 10 years preceding the years in issue, BGL had not paid any dividends.

Upon a review of the BGL 2007 and 2008 income tax returns, the Service disallowed various BGL expense deductions, including the year-end bonuses paid to shareholder attorneys.

After negotiations, BGL and the Service agreed that portions of the disputed compensation for the years in issue would be disallowed and reclassified as dividends. The disallowed portion of compensation (i.e., part of the shareholder attorney bonuses) were \$1.6 million and \$1.9 million in 2007 and 2008, respectively. The issue in this case was whether BGL was liable for accuracy-related penalties on the underpayment of its income tax.

The Tax Court considered the independent investor test in this shareholder attorney compensation dispute. BGL argued that the independent investor test was not relevant in this case. BGL argued that the shareholder attorneys lack the rights of equity owners because they acquire stock at book value

upon commencement of employment and surrender stock at book value upon termination of employment.

BGL claimed that this arrangement would not actually constitute a transference of an equity ownership interest. And, with regard to the independent investor test, BGL suggested that consequently all payments to shareholder attorneys should, therefore, be treated as compensation rather than as a return on equity.

The Tax Court held that the acquisition and sale of stock through a formula based on book value does not relinquish the shareholder attorneys' right to a return on their investments. The Tax Court concluded the independent investor test was a relevant test in determining the reasonableness of the disputed shareholder attorney compensation.

The Tax Court stated, "Ostensible compensation payments made to shareholder employees by a corporation with significant capital that zero out the corporation's income and leave no return on the shareholders' investments fail the independent investor test."<sup>15</sup>

The BGL reported book value of equity was \$8.0 million and \$9.3 million as of December 31, 2007 and 2008, respectively.

The Tax Court stated that an independent investor in BGL would not have forgone a return on equity through the bonus structure that eliminated book income. Therefore, the Tax Court concluded that the reported shareholder attorney compensation failed the independent investor test.

In summary, the Tax Court considered whether guidance (e.g., the independent investor test, relevant statutes, and judicial precedent) supported or were contrary to the deduction of shareholder bonuses as compensation.

The Tax Court concluded that BGL did not demonstrate reasonable cause for deducting the disputed bonuses as compensation, or that it had acted in good faith regarding the compensation deduction.

## CONCLUSION

The days when C corporations and S corporations can arbitrarily determine shareholder/executive compensation have passed. Due to the significant amount of money involved, the Service is increasingly scrutinizing the reported shareholder/executive compensation of C corporations and S corporations.

If audited—and if the Service and Tax Court find that shareholder/executive compensation was disproportionate and not based on the fair market value of the services rendered—then the taxpayer company potentially can incur a substantial penalty.

Retaining a qualified forensic analyst may be beneficial to reasonable shareholder/executive compensation. The recent judicial decisions summarized above underscore the importance of retaining a qualified, independent forensic analyst to prepare reasonable compensation analyses.

To estimate reasonable shareholder/executive compensation, the forensic analyst should consider relevant federal tax statutes, judicial guidance, and market-based compensation data of job positions at comparable companies.

### Notes:

1. Mayson Manufacturing Co. v. Commissioner, 178 F.2d 115 (6th Cir. 1949).
2. Pulsar Components International, Inc. v. Commissioner, T.C. Memo. 1996-129 (March 14, 1996).
3. Trucks, Inc. v. U.S., 588 F. Supp. 638 (D.C. Neb. 1984).
4. Elliotts, Inc. v. Commissioner, T.C. Memo. 1984-516 (September 27 1984).
5. Scott R. Miller and Charlene M. Blalock, "Compensation Adjustments in Business Valuations for Family Law Disputes," *American Journal of Family Law* (Spring 2017): 3-13.
6. H.W. Johnson, Inc., v. Commissioner, T.C. Memo. 2016-95 (May 11, 2016).
7. H.W. Johnson, Inc., T.C. Memo. 2016-95 at \*5.
8. Transupport, Incorporated v. Commissioner, T.C. Memo. 2016-216 (November 23, 2016).
9. Transupport, Incorporated v. Commissioner also considered discrepancies and errors related to cost of goods sold and inventory accounting practices. At the time of publication of this article, this case was under appeal.
10. Transupport, Incorporated, T.C. Memo. 2015-179.
11. Id. at \*9.
12. Id. at \*6.
13. Id.
14. Brinks Gilson & Lione a Professional Corporation v. Commissioner, T.C. Memo. 2016-20 (February 10, 2016).
15. Id. at \*5.



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# Cost of Capital Theory and Application for Fair Value Controversy Matters

Kevin M. Zanni

*In practice, applying a size premium to estimate the cost of equity capital as part of a business valuation engagement is a generally accepted analytical procedure. Before selecting and applying a size premium, however, the analyst should consider all of the potential issues related to incorporating a size premium in the cost of capital estimation.*

## INTRODUCTION

Valuation analysts (“analysts”) often use the income approach to value a closely held business enterprise. An important financial variable of the business valuation income approach involves the selection of the present value discount rate.

The cost of equity capital is an important component of the present value discount rate. Common equity capital estimation models used in the closely held business valuation process include the build-up rate model and the modified capital asset pricing model (“MCAPM”).<sup>1</sup>

As a component of these generally accepted models, analysts often include a size premium alpha adjustment factor as part of the cost of equity estimation procedure.

This discussion considers the following topics:

1. Empirical evidence supporting the size premium adjustment
2. Observations regarding the size premium
3. Observations regarding the CRSP size premium 10th decile category
4. Liquidity issues that may account for the size premium
5. Certain Delaware Chancery Court decisions involving a size premium discussion

The common formula for the build-up model (“BUM”) to estimate the cost of equity capital is presented as follows:

$$K_e = R_f + ERP + I_{RP} + S_{RP} + \alpha$$

where:

$K_e$  = Cost of equity capital

$R_f$  = Risk-free rate of return

$ERP$  = Long-term equity risk premium

$I_{RP}$  = Industry-related equity risk premium

$S_{RP}$  = Size-related equity risk premium

$\alpha$  = Unsystematic equity risk premium

There is general consensus among analysts as to the appropriate risk-free rate of return to use in the BUM. Analysts commonly select the market yield on the 20-year U.S. Treasury bond as the risk-free rate of return component. If investment duration is less than 20 years, an analyst may select a risk-free rate of return with an investment duration commensurate with the specific investment duration.

The selected long-term equity risk premium (“ERP”) is not as consistently applied among analysts. Certain analysts advocate the use of a more normalized equity risk premium, of say 5 percent. Other analysts elect to use the variables included in the CRSP Decile Size Premium Study published in the *2017 Valuation Handbook-U.S. Guide to Cost of Capital* (“Valuation Handbook”) in Appendix 3.<sup>2</sup>

The *Valuation Handbook* ERP data is the most commonly cited, providing an estimated ERP premium of around 6 percent.

Other components of the BUM cost of equity estimate often include an industry-related equity risk premium, a size-related equity risk premium, and an unsystematic equity risk premium. By adding an industry-related risk premium, general industry risk is incorporated in the cost of equity.

This general industry risk premium is not specifically addressed in the long-term equity risk premium component. The industry risk component of the build-up cost of equity capital incorporates systematic risk, in much the same way that beta incorporates industry risk in the CAPM.

The next two components of the BUM are the size-related equity risk premium and the unsystematic equity risk premium. An overview of the size-related equity risk premium is presented in the following pages of this discussion.

The unsystematic equity risk premium component is often applied by analysts. This component is used to incorporate risk that is specific to the subject investment—that is, lack of management talent, potential labor issues specific to the subject company, potential of losing a key client or key personnel, and/or potential cost/risk not identified in financial projections, and so forth.<sup>3</sup>

The basic CAPM formula for estimating the cost of equity capital for publicly traded security analysis is presented as follows:<sup>4</sup>

$$K_e = R_f + [\beta \times E_{RP}]$$

where:

- $K_e$  = Cost of equity capital
- $R_f$  = Risk-free rate of return
- $\beta$  = Industry beta
- $E_{RP}$  = Long-term equity risk premium

Analysts use many of the same components for the CAPM formula that are used in the BUM. That is, it is common for analysts to rely on the same risk-free rate of return and long-term equity risk premium component factors when presenting both the BUM and the CAPM to estimate the cost of equity. The one distinguishing CAPM factor is beta.<sup>5</sup>

Beta, in general terms, is used to incorporate market risk (general equity risk and industry risk) in an equity cost of capital estimate.

Further adjustments to CAPM include (1) the size-related equity risk premium component and (2) the unsystematic equity risk premium component. By making these alpha adjustments, the CAPM becomes the modified CAPM (or “MCAPM”).

The MCAPM formula for estimating the cost of equity capital for use in a closely held business valuation is presented as follows:

$$K_e = R_f + [\beta \times E_{RP}] + S_{RP} + \alpha$$

where:

- $K_e$  = Cost of equity capital
- $R_f$  = Risk-free rate of return
- $\beta$  = Industry beta
- $E_{RP}$  = Long-term equity risk premium
- $S_{RP}$  = Size-related equity risk premium
- $\alpha$  = Unsystematic equity risk premium

The MCAPM and BUM provide generally consistent and easy to replicate cost of equity capital calculations.

## EMPIRICAL EVIDENCE SUPPORTING THE SIZE PREMIUM

It is generally accepted that, based on empirical observation, small companies are a greater investment risk than larger companies and, therefore, smaller companies have greater cost of capital than larger companies. In other words, there is a significant (negative) relationship between size and historical equity returns.

It is also generally accepted that small companies have certain risk characteristics that are more prevalent than in larger companies.

These small company risk characteristics include the following:

1. Potential competition issues (it is easier to enter the market and compete with small companies, while larger companies have resources to mitigate competitive challenges)
2. Economic issues and concern (larger companies can better cope with economic downturn than small companies)
3. Limited access to capital (small companies can find it difficult to obtain funding while larger companies typically have more options for funding)
4. Management depth concerns (large companies do not have key employee concerns in the same way that smaller companies do)
5. Customer concentration and product concentration risk (small companies are typically not as diversified in product offerings and are often beholden to a small group of customers)
6. Liquidity concerns and lack of market coverage (small companies do not enjoy the same level of analyst coverage and small

company stock is typically less liquid than larger companies)

Rolf Banz, in a 1981 study, is credited and commonly cited for his research focusing on the empirical relationship between equity return and the total market value of NYSE common stocks.

According to Banz, smaller firms have higher risk-adjusted returns, on average, than larger firms. For the approximate 40 years covered in the study, on average, small firms recorded larger risk-adjusted returns than large firms traded on the NYSE. The Banz study found that the size effect did not exhibit linear attributes; however, the size effect was found to be more pronounced in smaller firms.

Another noteworthy finding in the Banz study was that the study suggests no theoretical foundation as to whether the size effect factor is due to size itself or whether size is just a proxy for one or more true but unknown factors correlated with size. According to Banz, the size effect exists but it is not clear why it exists.

The *Valuation Handbook* is a common source reference for the size premium risk adjustment. The *Valuation Handbook* provides empirical evidence of the size premium phenomena. It is published as an annual reference book, along with three quarterly updates.

The *Valuation Handbook* defines the size premium as the difference between actual historical excess returns and the excess return predicted by beta (referred to as the “CRSP size premium”).<sup>8</sup>

Exhibit 1 presents empirical evidence of the CRSP size premium, as published in the most recent *Valuation Handbook*.<sup>9</sup>

As presented in Exhibit 1, the empirical data illustrates stock market returns by size decile for the 1926 to 2016 time period.<sup>10</sup>

The annual stock market returns are separated into 10 deciles based on market capitalization. As the deciles get smaller, from 1 to 10, the historical stock market returns increase. The standard deviation of stock return portfolios also increases as deciles get smaller.<sup>11</sup> This increase in the standard deviation reflects noise in the data.

A review of Exhibit 1 indicates that the most statistical data noise in the 10 decile stratification is in the 10th decile classification.

Other empirical evidence, in support of the small capitalization size premium adjustment, is provided by international equity market data. For example, in the United Kingdom, a study conducted using its equity markets concluded a small capitalization stock premium of around 7 percent.<sup>12</sup> The U.K. study was conducted using equity market data from 1955 to 1984.

In 2015, an equity risk premium analysis study of small capitalization stocks in 23 global markets was conducted by Dimson, March, and Staunton.<sup>13</sup>

In the 23 global equity markets small cap stocks outperformed in every market except for Norway, Finland, and the Netherlands. In general, evidence of the small capitalization stock premium is more prevalent in developed markets than in emerging markets.

## OBSERVATIONS REGARDING THE SIZE PREMIUM

There are several observations regarding the data used to calculate the size premium adjustment. A few of these observations include the following:

- The small capitalization premium has disappeared in recent years.
- A premium is unduly influenced by stocks with less than \$5 million in market capitalization.
- The supporting data are too noisy to calculate a meaningful size premium estimate due to the evidence of significant standard errors and seasonality.

**Exhibit 1**  
**Current 10 Decile Statistics**  
**As of December 31, 2016**

Decile	Market Capitalization (in \$ millions)	Geometric Mean (%)	Arithmetic Mean (%)	Standard Deviation (%)
1 - Largest	24,361.7 to 609,163.5	9.31	11.05	18.92
2	10,784.1 to 24,233.7	10.56	12.82	21.49
3	5,684.0 to 10,711.2	11.04	13.57	23.35
4	3,520.6 to 5,676.7	10.85	13.80	25.56
5	2,393.7 to 3,512.9	11.49	14.62	26.18
6	1,571.2 to 2,390.9	11.37	14.81	27.11
7	1,033.3 to 1,570.0	11.58	15.41	29.02
8	569.3 to 1,030.4	11.56	16.14	33.01
9	263.7 to 567.8	11.56	16.97	37.18
10 - Smallest	2.5 to 263.0	13.31	20.27	42.45

Source: 2017 *Valuation Handbook: U.S. Guide to Cost of Capital*, Exhibit 4-1 and Appendix 3.

- There may be other factors than size that contribute to greater small capitalization stock returns compared to large capitalization stock returns, such as:
  - bid/ask spread bias,
  - delisting bias,
  - transaction costs, and
  - liquidity.

It is generally accepted that the small capitalization stock premium was observable prior to 1980. However, it appears that the small capitalization stock premium has decreased since 1981.<sup>14</sup>

The Horowitz study found that during the period of 1963 to 1981, the annualized return difference between small and large firms was greater than 13 percent.<sup>15</sup>

However, the study also found that, during the period of 1981 to 1997, the annualized difference was negative 2 percent.<sup>16</sup>

Perhaps the reason for the small capitalization stock premium decrease is twofold:

1. Market corrections induced by investor understanding of the small capitalization premium phenomena
2. External economic and technological changes in the way the securities are bought and sold

As suggested in the Horowitz study, a trend toward passive investing using index funds that give more weight to large capitalization stocks may be a reason for increases in capital gain performance of large capitalization stocks.<sup>17</sup>

Because small capitalization stock performance as compared to large capitalization stock performance over short-term duration is typically more erratic, measurement over a longer term is preferred. For holding measurement periods of 1 year, 5 years, 10 years, 20 years, and 30 years, small capitalization stocks outperform large capitalization stocks a majority of the time—measured from 1926 to 2016.<sup>18</sup>

As the measurement periods increase, so does the likelihood of small capitalization stock outperformance of large capitalizations stocks.

Small capitalization stock performance is cyclical, and cyclicalities should be expected. Small capitalization stock returns are variable and somewhat volatile. According to one analyst, if small companies always earned more than large companies, then small companies would not be a riskier investment endeavor in the aggregate.<sup>19</sup>

It is also pointed out that bond prices occasionally outperform equities. In 2014, long-term U.S. government bonds outperformed the S&P 500 Index by 10 percent.<sup>20</sup>

Even over a long period of time, which provides the strongest support for the existence of a small cap premium, the Horowitz study found that removing stocks with less than \$5 million in market capitalization causes the small firm effect to vanish.<sup>21</sup>

According to the Horowitz study, the percentage of companies with stock prices of less than \$2 per share was greater in the period of 1982 to 1997 than in the period of 1963 to 1981.<sup>22</sup>

In the smallest decile, 11.7 percent of companies traded at prices less than \$2 a share between 1963 to 1981. In the 1982 to 1997, the percentage of companies traded at prices less than \$2 per share in the smallest decile was 29.7 percent.

In general, historical equity returns exhibit unpredictable variability. Estimates of security risk using historical equity returns reflect noise in the form of large standard errors.<sup>23</sup>

As presented in Exhibit 1, as decile classifications of stock increase—correlated with smaller capitalization stocks—the standard deviation increases. The standard errors by decile class suggest that the small capitalization premium is fragile—almost to the point of lacking statistical significance.<sup>24</sup>

The January effect, seasonality of small capitalization stock returns, is a well-documented phenomenon. The January effect is described as the empirical observation that rates of return for small stocks have, on average, performed better in January than in other months of the year.<sup>25</sup>

In the Horowitz study, the average monthly return in the month of January for small capitalization stocks was 10.20 percent as compared to 0.73 for the average monthly return for February to December.<sup>26</sup>

The Horowitz study calculated the premium using NYSE, AMEX (now NYSE MKT), and Nasdaq stock returns for the period of 1963 to 1997. Other studies have reached similar conclusions. Although the January effect is interesting, it does not disprove that a size premium exists.

It is an unsettled discussion point that the bid/ask spread adds a certain bias to stock returns.<sup>27</sup> This observation is primarily focused on less liquid companies that have larger bid/ask spreads. Most of the small-size effect studies (such as the SBBI equity study prepared by Morningstar and the CRSP equity study prepared by Duff & Phelps) use the CRSP database, which relies on the closing stock price to measure rates of return.



For thinly traded stocks, the ask price is not always a realistic price. Because the small-size effect studies measure size using portfolio returns calculated on a monthly basis, one publication suggests the bid/spread bias issue has only a trivial impact on the small stock premium.

Some observers suggest that a delisting bias exists in the Morningstar decile size premium calculations due to its use of the CRSP database without adjustment.<sup>28</sup>

The reason for this possible bias is because the CRSP database information is allegedly missing prices for certain securities in the period immediately after these certain securities are delisted from a stock exchange.

According to the CRSP, as concluded in a CRSP white paper, the so-called delisting bias is greatly exaggerated.<sup>29</sup>

A few observers have suggested that the size effect is not relevant because various studies have ignored transaction costs in measuring rates of return.<sup>30</sup>

The primary observation is that, small capitalization stocks often have higher transaction costs than large stocks. Because of the higher transaction costs for small capitalization stocks, it is possible that the historical small-stock-related size premium would be reduced if transaction costs and holding periods were factored into the measurement of rates of return.

As published in the *Cost of Capital*, 5th edition, Ashok Abbott prepared a study of transaction costs by decile for securities listed on the NYSE, AMEX, and the Nasdaq from January 1993 to December 2008. The securities trading cost was estimated as the difference between the daily holding return (closing price to closing price) and the daily trading return (ask price from the previous day to the bid price of the current day).

As presented in Exhibit 2, as company size decreases, the average daily trading cost, as a percentage of the trade, increases. The study found that larger firms are traded at lower costs and are subject to less pricing pressure than smaller firms.

Abbott also prepared an analysis of trading costs as differentiated by liquidity. The results of the Abbott study suggest that as company liquidity decreases, trading costs increase. Another notable finding of the Abbott study indicates that the least liquid stocks comprise the smallest market capitalization size-related decile.

Exhibit 3 presents the Abbott study analysis of liquidity and trading costs.

## Exhibit 2 Average Trading Costs by Market Value of Equity Decile For the Period January 1993 to December 2008

Market Value of Equity Portfolio	Average Daily Trading Cost
1 - Largest Companies	0.75489%
2	1.07736%
3	1.33369%
4	1.67466%
5	2.05954%
6	2.50398%
7	3.16594%
8	4.13995%
9	5.57523%
10 - Smallest Companies	9.67356%
Source: <i>Cost of Capital</i> , 5th ed., 367.	

A discussion of stock liquidity and the equity size premium is presented in more detail below.

## OBSERVATIONS OF THE CRSP SIZE PREMIUM 10TH DECILE CATEGORY

The companies that comprise the CRSP size premium 10th decile category have equity market capitalizations that range from \$2.5 million to \$262.9 million. As of December 31, 2016, the risk premium related to the companies comprising the 10th decile was 5.59 percent.<sup>31</sup>

## Exhibit 3 Average Trading Costs Based on Equity Liquidity For the Period January 1993 to December 2008

Decile by Liquidity	Average Daily Trading Cost
1 - Most Liquid Companies	1.48241%
2	1.82615%
3	2.02649%
4	2.15579%
5	2.28703%
6	2.47802%
7	2.73914%
8	3.03041%
9	3.73256%
10 - Least Liquid Companies	5.60277%
Source: <i>Cost of Capital</i> , 5th ed., 368.	

The companies that comprise the CRSP size premium 10th decile are broken down into subcategories 10a and 10b, as presented in the Valuation Handbook. The companies that comprise the 10a subdecile include companies with market capitalizations between \$127.3 million and \$262.9 million, and the reported size premium is 4.09 percent.<sup>32</sup>

The companies that comprise the 10b subdecile include companies with market capitalizations between \$2.5 million and \$127.3 million, and the reported size premium is 8.64 percent.<sup>33</sup>

Within the 10a subdecile and 10b subdecile categories of the 10th decile, the Valuation Handbook presents more subcategories. The 10a subdecile is broken into 10w and 10x subdeciles, while the subdecile 10b is broken into 10y and 10z.

Exhibit 4 presents the Valuation Handbook, CRSP size premium 10th decile subdecile category market capitalizations and size premiums subcategory breakdown.

As provided in Exhibit 4, companies that are classified in the CRSP size premium 10th decile vary considerably in market capitalization and applicable size premium. The size premium ranges from 3.10 percent to 11.63 percent, a spread of 8.53 percent, or 853 basis points.

As seen in Exhibit 4, as the size of the company increases, its size premium risk decreases. That is why it is important to correctly interpret and apply the size premium component of the MCAPM—assuming an analyst applies an equity size premium adjustment.

According to the Valuation Handbook, “The CRSP Deciles Size Premia include all companies with no exclusion of speculative (e.g., start-up) or distressed companies whose market capitalization may be small because they are speculative or distressed.”<sup>34</sup>

The distressed company issue can be seen through analysis of the 10th decile subcategories of 10y and 10z.

According to the *Valuation Handbook*, subdecile 10y includes companies in the 5th percentile with five-year average earnings before interest, taxes, depreciation, and amortization (“EBITDA”) of negative \$22.0 million. Companies classified in subdecile 10y at or below the 25th percentile (lower quartile) reported negative EBITDA.

Similarly, subdecile 10y companies have five-year net income ranging from negative \$37.15 million to a positive \$11.5 million. Not only are subdecile 10y companies significantly smaller, more than half are unprofitable.<sup>35</sup>

Exhibit 5 presents financial statistics related to the CRSP size premium 10th decile subcategories 10y and 10z as published in Valuation Handbooks for 2014 to 2017.

As presented in Exhibit 5, the companies that populate subcategory 10y and 10z are, on average, recording negative net income. In many cases, the companies that populate subcategory 10y and 10z are recording negative EBITDA.

Collectively, this information supports the theory that the CRSP size premium 10th decile is comprised of troubled and distressed companies.

According to James Hitchner in *Financial Valuation and Litigation Expert*, “It’s important to note that 80 percent of the companies in decile category 10b are from 10z. As such, let’s focus on 10z. At the 50th percentile of 10z the operating margin is –1.11 percent. Yes, on average, these companies are losing money. At the 25th percentile the operating margin is –21.27 percent. Furthermore, 62 percent of the companies in 10z are from only three industry sectors: financial services, technology, and healthcare.”<sup>36</sup>

As indicated by Hitchner, based on dated information that is still relevant, not only does the CRSP size premium 10th decile include troubled companies, it is skewed by its industry concentration.

A few years back, Morningstar provided some additional detail related to the 10th decile regarding

the probability of default of the companies in the 10th decile. Exhibit 6 provides statistics, as published in the Ibbotson *SBB* 2012 *Valuation Yearbook* by Morningstar, of the probability of default of companies in the decile 10 subcategories.

#### Exhibit 4 10th Decile Subcategories As of December 31, 2016

10th Decile Subcategory	Market Capitalization	Equity Size Premium
Decile 10w	\$190.5 Million to \$262.9 Million	3.10%
Decile 10x	\$127.3 Million to \$190.4 Million	5.33%
Decile 10y	\$73.6 Million to \$127.3 Million	7.21%
Decile 10z	\$2.5 Million to \$73.5 Million	11.63%

Source: 2017 *Valuation Handbook: U.S. Guide to Cost of Capital*, Appendix 3.

**Exhibit 5**  
**10th Decile Subcategories 10y and 10z**  
**Statistics as of September 30, 2013, 2014, 2015, and 2016**

	Percent of Subcategory	Market Value of Equity (in \$ Millions)	Market Value of Invested Capital (in \$ Millions)	Sales (in \$ Millions)	5-Year Average Net Income (in \$ Millions)	5-Year Average EBITDA (in \$ Millions)
<b>As of September 30, 2013:</b>	95th Percentile	181.19	566.53	734.63	12.99	80.76
10th Decile Subcategory 10y	75th Percentile	161.62	227.93	233.67	5.47	22.95
Market Value of Equity Range	<b>50th Percentile</b>	<b>138.58</b>	<b>175.02</b>	<b>74.86</b>	<b>(1.71)</b>	<b>7.74</b>
\$100.9 Million and \$184.9 Million	25th Percentile	116.69	139.05	29.38	(15.95)	(7.13)
	5th Percentile	103.44	110.39	1.42	(71.07)	(30.51)
<b>As of September 30, 2013:</b>	95th Percentile	94.04	210.99	318.61	7.56	27.73
10th Decile Subcategory 10z	75th Percentile	70.49	95.17	78.89	1.81	6.62
Market Value of Equity Range	<b>50th Percentile</b>	<b>44.97</b>	<b>64.98</b>	<b>31.77</b>	<b>(1.42)</b>	<b>1.18</b>
\$2.4 Million and \$100.8 Million	25th Percentile	25.12	34.97	15.29	(8.25)	(4.43)
	5th Percentile	7.89	11.23	1.03	(33.57)	(17.97)
<b>As of September 30, 2014:</b>	95th Percentile	184.30	916.88	848.90	12.99	104.79
10th Decile Subcategory 10y	75th Percentile	169.30	268.47	226.83	5.54	18.68
Market Value of Equity Range	<b>50th Percentile</b>	<b>153.44</b>	<b>182.31</b>	<b>72.73</b>	<b>(1.66)</b>	<b>5.47</b>
\$116.3 Million and \$190.5 Million	25th Percentile	133.02	158.54	32.72	(11.59)	(4.25)
	5th Percentile	118.02	127.99	2.15	(51.48)	(22.67)
<b>As of September 30, 2014:</b>	95th Percentile	108.54	216.73	254.92	7.31	22.16
10th Decile Subcategory 10z	75th Percentile	79.40	105.94	59.58	1.97	4.70
Market Value of Equity Range	<b>50th Percentile</b>	<b>53.00</b>	<b>72.10</b>	<b>26.04</b>	<b>(1.07)</b>	<b>0.04</b>
\$3.0 Million and \$115.9 Million	25th Percentile	30.78	39.48	10.00	(7.53)	(4.60)
	5th Percentile	11.52	15.44	0.21	(27.38)	(18.05)
<b>As of September 30, 2015:</b>	95th Percentile	106.48	574.94	638.20	15.03	90.47
10th Decile Subcategory 10y	75th Percentile	93.85	142.93	125.62	3.85	10.99
Market Value of Equity Range	<b>50th Percentile</b>	<b>81.81</b>	<b>99.61</b>	<b>41.82</b>	<b>(0.61)</b>	<b>2.22</b>
\$64.8 Million and \$108.6 Million	25th Percentile	73.90	82.50	22.04	(13.50)	(8.08)
	5th Percentile	65.82	68.54	8.36	(28.86)	(20.19)
<b>As of September 30, 2015:</b>	95th Percentile	61.95	231.27	321.69	5.63	29.72
10th Decile Subcategory 10z	75th Percentile	47.03	65.43	72.01	0.78	4.00
Market Value of Equity Range	<b>50th Percentile</b>	<b>32.09</b>	<b>43.61</b>	<b>27.47</b>	<b>(3.34)</b>	<b>(0.86)</b>
\$2.0 Million and \$64.7 Million	25th Percentile	17.65	24.99	9.81	(11.50)	(6.72)
	5th Percentile	6.13	9.35	1.79	(25.34)	(14.78)
<b>As of September 30, 2016:</b>	95th Percentile	123.59	694.33	516.09	11.54	69.39
10th Decile Subcategory 10y	75th Percentile	109.94	198.68	151.97	4.86	17.89
Market Value of Equity Range	<b>50th Percentile</b>	<b>96.02</b>	<b>121.77</b>	<b>51.50</b>	<b>(1.50)</b>	<b>3.99</b>
\$73.6 Million and \$127.3 Million	25th Percentile	82.85	99.80	29.23	(16.28)	(10.61)
	5th Percentile	74.68	77.79	8.28	(37.15)	(22.00)
<b>As of September 30, 2016:</b>	95th Percentile	70.11	176.78	248.60	4.60	22.77
10th Decile Subcategory 10z	75th Percentile	53.10	72.14	67.03	0.71	3.18
Market Value of Equity Range	<b>50th Percentile</b>	<b>34.34</b>	<b>46.75</b>	<b>25.30</b>	<b>(3.96)</b>	<b>(1.55)</b>
\$2.5 Million and \$73.5 Million	25th Percentile	18.85	25.49	8.09	(13.93)	(9.47)
	5th Percentile	6.66	9.76	1.03	(25.15)	(18.67)

Sources: 2017 Valuation Handbook: U.S. Guide to Cost of Capital , Exhibit 4-10; 2016 Valuation Handbook: Guide to Cost of Capital , Exhibit 4-11; 2015 Valuation Handbook: Guide to Cost of Capital , Exhibit 4-11; and 2014 Valuation Handbook: Guide to Cost of

## Exhibit 6 Probability of Default of Decile 10 Subcategories As of December 31, 2011

Probability of Default	10a Percent of Companies	10b Percent of Companies	10w Percent of Companies	10x Percent of Companies	10y Percent of Companies
75%	0	3	0	0	1
50%	2	7	1	3	3
25%	5	17	4	7	12
20%	6	21	4	7	14
15%	8	25	5	10	17
10%	10	31	8	13	22
5%	16	38	15	17	28

Source: 2012 Ibbotson SBBI Valuation Yearbook, Table 7-15.

As of December 31, 2011, a little less than 20 percent of subcategory 10b had a 25 percent probability of default. As company size decreases, from subcategory 10w to subcategory 10z, the probability of default increases.

As presented in the Ibbotson *SBBI 2013 Valuation Yearbook* published by Morningstar, the 10th decile was comprised of significantly more companies in the 10b subcategory than the 10a subcategory.<sup>37</sup> As of December 31, 2002, there were 319 companies populating the 10a subcategory and 1,124 companies populating the 10b subcategory.

Furthermore, as of December 31, 2012, the significant majority of the 10b category was comprised of companies in the 10z subcategory—846 companies in 10z compared to 278 companies in 10y.<sup>38</sup>

Of these companies in the 10z subcategory, the majority were financial services businesses.<sup>39</sup>

Also, as presented in the 2013 Ibbotson *SBBI Valuation Yearbook*, Morningstar changed its methodology for determining the likelihood of company default.

The results of the new methodology were similar to the results of the methodology used for 2012 Ibbotson *SBBI Valuation Yearbook*. Morningstar concluded that financial distressed companies are more likely to be small equity capitalization stocks.<sup>40</sup>

## LIQUIDITY ISSUES THAT MAY ACCOUNT FOR THE SIZE PREMIUM

According to Aswath Damodaran, “the notion that market for publicly traded stocks is wide and deep has led to the argument that the net effect of illiquidity on aggregate equity risk premiums should be small.”<sup>41</sup>

It is generally accepted that less liquid securities are inherently of a greater risk profile than highly liquid securities and, therefore, investors require greater rates of return to invest in less liquid investments. In fact, a growing body of work investigating the impact of liquidity on returns has emerged.<sup>42</sup>

The cost of illiquidity on security pricing is influenced by macroeconomic direction. Stock illiquidity increases when economies slow down and during periods of crisis, thus exaggerating the effects of both phenomena on the equity risk premium.<sup>43</sup>

Security liquidity has value as discussed in the following example. Consider two assets with the same cash flows and average liquidity, but one asset has much more liquidity risk . . . if the assets had the same price, investors would avoid the one with the high liquidity risk, because they would fear bearing greater losses if they needed to sell it in a liquidity crisis.<sup>44</sup>

For many analysts, the calculation of the cost of equity includes a size premium alpha factor developed from the CRSP database. There are numerous theories addressing why small market capitalization stocks provide greater investment returns. However, there is an increasing amount of interest as to how the CRSP size premium decile conclusions may be skewed by an embedded liquidity discount.

Several studies have shown that an embedded stock liquidity discount helps to explain part of the reason that smaller capitalization companies generate higher returns—that is, the investor is compensated for investing in a low liquidity and therefore riskier asset.

Exhibit 7 on the next page presents liquidity statistics and the impact of liquidity organized by equity market capitalization quartile classification. The analysis corresponds to publicly traded securities in the 1972 to 2016 time frame.

An interesting aspect of the embedded liquidity issue is that market capitalization and illiquidity are not always correlated since there are small, liquid companies and large, illiquid ones in the market.<sup>45</sup>

However, based on the data presented in Exhibit 7, it appears that the smallest capitalization securities are affected by liquidity concerns far more



than larger capitalization securities. It is also noteworthy that the subcategory of micro-cap stocks populated with the most companies, on average, was classified as low liquidity securities—a total of 342 companies.

In a research article published in the *Journal of Business Valuation and Economic Loss*, Frank Torchio and Sunita Surana studied the effect of liquidity on size premium calculations (“Torchio study”).<sup>46</sup>

According to the Torchio study, a substantial portion of the size premium measurement reflects lack of liquidity. The Torchio study found that the lack of liquidity issue, an embedded liquidity issue, is problematic in certain fair value cases.

It is problematic because the application of the size premium—more specifically the application of the premium in small company valuations—may cause the fair value to be understated and may include an unintended valuation discount.

In order to study the effect of embedded liquidity related to the size premium, the Torchio study progressed through several procedures.<sup>47</sup> The three primary procedures are described as follows.

For the first procedure, the Torchio study replicated the Ibbotson SBBI 10 decile analysis using the CRSP database. The study applied the same or similar procedures used by Ibbotson, and now Duff & Phelps, to replicate the published SBBI 10 decile study results. It also replicated the 10th decile subcategories.

For the second procedure, the Torchio study subdivided the SBBI 10 deciles and 10th decile subcategories into high liquidity and low liquidity categories.

For the final procedure, the liquidity premium is calculated much the same way that the SBBI 10 decile size premiums are calculated. The liquidity premium is calculated as the excess return to the predicted CAPM return.

Exhibit 8 on the following page presents the Torchio study liquidity premium analysis results.<sup>48</sup>

The Torchio study provides empirical evidence of the impact that liquidity has on security rates of return. Based on Exhibit 8, the following conclusions appears to be true:

#### Exhibit 7 Liquidity Effect on Size Premium Based on Quartile Portfolio Classifications As Published in the 2017 *Valuation Handbook*

	Low Liquidity	Mid-Low Liquidity	Mid-High Liquidity	High Liquidity
<b>Micro-Cap</b>				
Geometric Mean (%)	16.03	15.66	9.65	-0.29
Arithmetic Mean (%)	18.41	19.28	14.97	4.91
Standard Deviation (%)	22.93	28.84	34.91	33.37
Average Number of Companies	342	182	125	98
<b>Small-Cap</b>				
Geometric Mean (%)	15.68	14.35	12.2	5.77
Arithmetic Mean (%)	17.35	16.93	15.52	9.96
Standard Deviation (%)	19.56	23.99	27.16	30.41
Average Number of Companies	198	201	174	175
<b>Mid-Cap</b>				
Geometric Mean (%)	14.19	13.9	12.67	8.15
Arithmetic Mean (%)	15.57	15.6	14.81	11.69
Standard Deviation (%)	17.75	19.68	21.75	27.63
Average Number of Companies	131	177	202	237
<b>Large-Cap</b>				
Geometric Mean (%)	11.2	12.05	11.75	8.89
Arithmetic Mean (%)	12.44	13.18	13.27	11.87
Standard Deviation (%)	16.33	15.5	17.76	24.79
Average Number of Companies	75	188	247	237

Source: 2017 *Valuation Handbook: U.S. Guide to Cost of Capital*, Exhibit 4-13.

- The high liquidity level securities (stocks that exhibit trading liquidity above the decile group median) rates of return are significantly lower than the low liquidity level securities at each decile grouping.
- Compared to the size premium statistics presented in the 2011 *Ibbotson SBBI Valuation Yearbook*, the high liquidity group for each decile and subdecile category had much lower rates of return.
- For SBBI deciles 1 through 9, the difference between the high liquidity equity premium estimate and the SBBI size premium is not as significant as it is for decile 10 and subcategories.
- The liquidity premium effect is most pronounced at the 10z subcategory decile.
- The size premium is clearly influenced by the low liquidity securities.

According to the Torchio study, the large-size premiums calculated by Ibbotson are the consequence of a disproportionately greater number of low liquidity stocks comprising the small-size portfolios.<sup>49</sup>

**Exhibit 8**  
**Liquidity Premium Analysis**  
**Based on the Torchio Study**  
**Using CRSP Data from 1926 to 2010**

SBBI Decile Group	Liquidity Level	Liquidity Premium (return in excess of CAPM return) (%)	2011 Ibbotson SBBI Size Premium (%)	Difference between Liquidity and Size Premium (%)
1	High	-1.35	-0.38	<b>-0.97</b>
1	Low	0.13		0.51
2	High	-0.16	0.81	<b>-0.97</b>
2	Low	2.25		1.44
3	High	-0.05	1.01	<b>-1.06</b>
3	Low	2.88		1.87
4	High	0.07	1.20	<b>-1.13</b>
4	Low	3.25		2.05
5	High	0.57	1.81	<b>-1.24</b>
5	Low	4.01		2.20
6	High	-0.33	1.82	<b>-2.15</b>
6	Low	4.90		3.08
7	High	0.06	1.88	<b>-1.82</b>
7	Low	4.34		2.46
8	High	0.19	2.65	<b>-2.46</b>
8	Low	5.40		2.75
9	High	1.99	2.94	<b>-0.95</b>
9	Low	5.25		2.31
10	High	2.46	6.36	<b>-3.90</b>
10	Low	11.18		4.82
10w	High	-0.37	3.99	<b>-4.36</b>
10w	Low	8.08		4.09
10x	High	4.57	4.96	<b>-0.39</b>
10x	Low	10.40		5.44
10y	High	3.34	9.15	<b>-5.81</b>
10y	Low	12.85		3.70
10z	High	3.57	12.06	<b>-8.49</b>
10z	Low	17.55		5.49

Source: Frank Torchio and Sunita Surana, "Effect of Liquidity on Size Premium and its Implications for Financial Valuations," *Journal of Business Valuation and Economic Loss* 9, no. 1 (2014): Tables 10, 11, and 12.

For fair value in certain jurisdictions due to the presence of an embedded liquidity discount, the application of an equity size premium alpha factor based on the 10th decile or 10th decile subcategories may not be appropriate.

## CERTAIN DELAWARE CHANCERY COURT DECISIONS INVOLVING SIZE PREMIUM DISCUSSION

This section discusses certain appraisal rights actions filed in the Delaware Court of Chancery

(the "Chancery Court"). The Delaware appraisal rights statute mandates fair value of a corporation as a going concern as the appropriate standard of value. The statute also allows the same fair value standard in shareholder oppression and shareholder appraisal rights actions to determine noncontrolling shareholder share value.

The Delaware Supreme Court clarified the meaning of fair value in 1950, defining it as the value that had been taken from the dissenting shareholder:

The basic concept of value under the appraisal statute is that the stockholder is entitled to be paid for that which had been taken from him, viz., his proportionate interest in a going concern. By value of the stockholder's proportionate interest in the corporate enterprise is meant the true intrinsic value of his stock which has been taken by the merger.<sup>50</sup>

Recently, several Chancery Court decisions involved an equity size premium related discussion, including the following:

1. *Gearreald v. Just Care, Inc.* ("Just Care")
2. *Merlin Partners LP, and AAMAF, LP v. AutoInfo, Inc.* ("Merlin Partners")
3. *In re Appraisal of DFC Global Corp.* ("DFC Global")<sup>51</sup>
4. *Merion Capital L.P. and Merion Capital II L.P. v. Lender Processing Services, Inc.* ("Merion Capital")
5. *Dunmire v. Farmers & Merchants Bancorp of Western Pennsylvania, Inc.* ("Dunmire")

## Just Care

In the *Just Care* decision, the treatment and application of the equity size premium was a significant point of contention. In *Just Care*, both experts agreed that, by size alone, the Just Care company should be classified in the Ibbotson decile category of 10b.

As of the valuation date, the Ibbotson 10b decile included companies with a market capitalization between \$1.6 million and \$136 million, and an indicated equity size premium of 9.53 percent. The specific point at issue is that the company expert applied the 9.53 premium while the petitioner's expert applied a smaller equity size premium of 4.11 percent.

The small equity size premium of 4.11 percent was based on the Ibbotson 10a decile. At trial it was argued that the 4.11 percent size premium was appropriate because of the "well-documented liquidity effect" contained within the size premium data.<sup>52</sup>

According to the petitioners' analyst, because "the illiquidity premium reflected in the size premium data for small cap stocks is akin to a liquidity discount" such a discount "must be eliminated in a fair value determination—much like a discount for lack of marketability or minority interest."<sup>53</sup>

In *Just Care*, the Chancery Court found that the petitioner's expert was correct in that a general liquidity discount cannot be applied in an appraisal rights proceeding. Such a discount generally relates to the marketability of the company's shares and is, therefore, prohibited.

In other words, on one hand, the Chancery Court found that entity or corporate level discounts were not appropriate and cited the *Borruso v. Communications Telesystems International* matter as support for its ruling.<sup>54</sup>

To the extent Respondent is arguing for the application of a "corporate level" discount to reflect the fact that all shares of WXL shares were worth less because there was no public market in which to sell them, I read Cavalier Oil as prohibiting such a discount. This is simply a liquidity discount applied at the "corporate level." Even if taken "at the corporate level" (in circumstances in which the effect on the fair value of the shares is the same as a "shareholder level" discount) such a discount is, nevertheless, based on trading characteristics of the shares themselves, not any factor intrinsic to the corporation or its assets. It is therefore prohibited.

On the other hand, the Chancery Court found that although a liquidity discount related to the marketability of a company's shares is prohibited, that does not mean that the use of *any* input that is correlated with a company's illiquidity is, per se, invalid.<sup>55</sup>

A company's liquidity is highly correlated with its size, that is, smaller companies tend to be less liquid.<sup>56</sup> As a result, their equity is riskier and investors will demand higher returns from such investments, increasing the cost of capital. It is this kind of liquidity effect that is captured in the Ibbotson size premium.

In support of its decision, the Chancery Court cited the *JRC Acquisition Corp.* matter, as follows:<sup>57</sup>

The Ibbotson size premium number reflects the empirical evidence that smaller firms have higher returns than larger firms. Petitioner's position that JR Cigar is a low-cap company (rather than a micro-cap company) decreases the expected rate of return on JR Cigar's stock by lowering the "size premium" applied. The problem with using liquidity as a basis for justifying a lower expected return, however, is that low liquidity is associated with higher expected returns. Investors seek compensation for the high transaction costs of illiquid securities, e.g., the bid/ask spread. In other words, even if JR Cigar had a higher market capitalization than the market price of its stock suggested because of its illiquidity, investors would still expect higher returns because of its illiquidity.

According to the Chancery Court, the liquidity effect, in this case, arises in relation to transactions between Just Care and its providers of capital.<sup>58</sup>

As such, the Chancery Court reasoned that, the liquidity effect is part of the company's value as a going concern. Where a company's illiquidity affects its ability to obtain financing for its operations, the company's overall risk and return profile will be affected, that is, the company will be worth less as a going concern because its financing costs are higher.<sup>59</sup>

In *Just Care*, the Chancery Court ruled against the petitioner theory that the embedded liquidity premium in the Ibbotson's size-related data should be adjusted in order to develop a cost of capital estimate.

The Chancery Court found that the liquidity effect at issue relates to the company's ability to obtain capital at a certain cost and not a shareholder level liquidity discount issue. This finding suggests

that the liquidity effect is related to a company's intrinsic value as a going concern, and it should be included when calculating its cost of capital.

The Chancery Court, in rejecting the petitioner argument, stated that the adjustment by the petitioners' analyst, as a matter of law, is unreliable. The Chancery Court concluded that small company-size premiums are regularly applied in appraisal proceedings in the Chancery Court without the type of adjustment performed by petitioners' analyst.

In other words, the Chancery Court found that the petitioner analyst's adjustment was unprecedented and, furthermore, had not been peer reviewed.

Although, the Chancery Court ruled against the petitioner argument in *Just Care*, it didn't completely dismiss the idea of a challenge. The Chancery Court concluded that it may adjust a company's size premium where sufficient evidence is presented to show that the company's individual characteristics make it less risky than would otherwise be implied under its corresponding decile classification based on size alone.

In the instant case, however, the petitioners' analyst did not argue that *Just Care* was less risky than other companies in decile 10b. The petitioners devoted only one sentence in the opening brief to attempt to justify the treatment of *Just Care* as a decile 10a company.<sup>60</sup>

Because petitioners did not provide compelling evidence for treating *Just Care* as a decile 10a company, the Chancery Court concluded that the decile 10b was appropriate based on the company size.

## Merlin Partners

The *Merlin Partners* dispute is related to a cash-out merger of AutoInfo, Inc. ("AutoInfo"), shareholders. The petitioners in this matter demanded the appraisal of their shares in connection with the merger. Similar to the *Just Care* decision, the analyst for the petitioner and the analyst for the defendant did not agree on the appropriate equity size premium.

The petitioner analyst selected the size premium for Ibbotson's micro-cap category. The micro-cap category includes the 9th and 10th deciles. For the year of the instant case, companies in the 9th and 10th decile had market capitalizations ranging from \$1.139 million to \$514.209 million.<sup>61</sup>

The defendant analyst selected the 10z subdecile. The Ibbotson's 10z subdecile, at the time of the AutoInfo valuation analysis, consisted of companies with market capitalizations between \$1.139 million and \$96.164 million.<sup>62</sup>

At the time of the merger, AutoInfo had an approximate publicly traded market capitalization of

\$30 million.<sup>63</sup> Therefore, the AutoInfo market capitalization was fully within subdecile 10z. In *Merlin Partners*, because the AutoInfo market capitalization was within subdecile 10z, the Chancery Court concluded that AutoInfo should be classified in the 10z size premium and not the micro-cap size premium.

The petitioner valuation analyst testified that he "would have used [a size premium] close to the 10z category, if not 10z itself," had he not believed it necessary to strip out a marketability factor.<sup>64</sup>

The Chancery Court reasoned that, just like in *Just Care*, the petitioner's valuation adjustment ran counter to Delaware case law.

In the *Merlin Partners* decision, the Chancery Court rejected the adjustment of using a lower equity size-related premium (lower meaning smaller premium, due to the use of a higher capitalization decile classification) by reference to *Just Care* in the following passage: "because the liquidity effect at issue relate[d] to the Company's ability to obtain capital at a certain cost, . . . [and was therefore] related to the Company's intrinsic value as a going concern and should be included when calculating its cost of capital."<sup>65</sup>

The Chancery Court ruled that the publicly traded market capitalization of AutoInfo should be used to select the implied size-related equity risk premium.

## DFC Global

The details related to the equity size premium issue in the *DFC Global* matter are different than the *Just Care* and *Merlin Partners* matters. However, the valuation analyst selection of the equity size premium was an issue in *DFC Global*.

Both analysts applied size premiums in calculating the DFC Global Corporation ("DGC") weighted average cost of capital.<sup>66</sup>

The analysts, however, disagreed on the magnitude of the equity size premium. The Chancery Court, in *DFC Global*, sided with the petitioner analyst's use of the publicly traded market capitalization of DGC in selecting an equity size premium.

Because DGC was publicly traded, the Court relied on the DGC equity market capitalization as of the date of the analysis. It then discounted the calculated equity market capitalization to account for the potential decrease in market capitalization due to discouraging financial results announced on the day of the DGC transaction.

In *DFC Global*, the Chancery Court considered that the defendant analyst arrived at a conclusion using a combination of the (1) the micro-cap premium and (2) the Duff & Phelps Risk Premium Report.



Because DGC was a financial-services-related business, the Chancery Court excluded the application of the Duff & Phelps Risk Premium Report for the subject business.<sup>67</sup>

The opposing analyst applied the 9th decile size premium. As of the valuation date, DGC had an approximate market capitalization of \$346 million, which was in the 9th decile of \$340 million to \$633 million.<sup>68</sup>

Because the DGC market capitalization was near the lower end of the 9th decile and it had just announced poor financial performance that may not have been priced into the \$346 million equity market capitalization, the Court selected the decile 10w size premium.<sup>69</sup>

One reason for selecting the 10w decile and not the micro-cap decile is that the decile 10w equity size premium is not as unduly influenced by very small companies and thinly traded stocks that are prevalent in the lower 10th decile equities.

## Merion Capital

Merion Capital is a shareholder dispute related to a merger of Lender Processing Services, Inc. (“LPS”), and Fidelity National Financial, Inc. The petitioners demanded the appraisal of their shares in connection with the merger. Similar to the Just Care decision, the valuation analyst for the petitioner and valuation analyst defendant did not agree on the appropriate equity size premium. However in Merion Capital, one analyst applied a size premium and one did not.

In Merion Capital, the petitioner’s analyst applied a 0.92 percent size premium.<sup>70</sup>

The respondent analyst did not add an equity size premium. The reason for not including an equity size premium was that there “is no consensus in the academic literature as to whether such a premium still exists.”<sup>71</sup>

Because the respondent analyst did not add an equity size premium, and the exclusion of the size premium favored the petitioner, the Chancery Court accepted the respondent analyst decision not to add an equity size premium.

## Dunmire

In *Dunmire*, the Chancery Court provided some commentary on the equity size premium issue in a footnote to its decision, as follows:<sup>72</sup>

The use of a size premium is a subject of some controversy. See, e.g., *Guide to Cost of Capital* 4:8 (“In fact, some commentators contend that the historical data are so flawed that valuation analysts can dismiss all

research results that support the size effect. For example, is the size effect merely the result of not measuring beta correctly? Are there market anomalies that simply cause the size effect to appear? Is size just a proxy for one or more factors correlated with size, suggesting that valuation analysts should use those factors directly rather than size to measure risk? Is the size effect hidden because of unexpected events?”); see also Hopkins Report Sections 138-45. I express no opinion on this debate. My use of a size premium simply follows from the fact that it is integral to the methodologies both experts utilized, from which my own determination of the discount rate is derived.

In *Dunmire*, both analysts used an equity size premium, so the Chancery Court did not take a formal position with respect to the equity size premium debate.

However, the Chancery Court’s opinion suggested that it is open to considering arguments as to why the equity size premium may be excluded. It appears that the argument for and against the equity size premium is not likely to disappear anytime soon.

## SUMMARY AND CONCLUSION

Analysts often use the income approach in valuation-related forensic analysis matters. The income approach may be used to estimate value in matters prepared according to the following standards of value:

- fair value
- fair market value
- intrinsic value
- investment value

There are at least two primary inputs to the income approach. The income stream or cash flow and the investment rate of return—present value discount rate—are primary components.

The focus of this discussion was to provide some background and information on the bits and pieces that form the foundation of the investment rate of return used to discount or capitalize the selected income stream.

Dating back to the Banz study, and more recently by way of the Duff & Phelps CRSP size premium analysis, empirical evidence has been gathered and analyzed in support of the size-related phenomena

theory. Small closely held company investment returns cannot be entirely explained by the standard application of the basic CAPM model for estimating the cost of equity capital.

Because the basic CAPM does not entirely explain small closely held company investment returns, analysts typically apply the MCAPM to estimate the cost of equity capital in such instances.

There are many observations regarding the size-related phenomena theory and the CRSP size premium data used by a majority of analysts. These observations include the following:

1. The small capitalization premium has disappeared in recent years. The empirical evidence supports varying size-related premium at different points in time. Therefore, in certain time periods, it would not be surprising for small capitalization stocks to provide lower investment returns than larger capitalization stocks.
2. Premium, at the smallest level, is unduly influenced by stocks of less than \$5 million in market capitalization and stocks that trade at prices less than \$2 per share. The most statistical noise in the CRSP size premium data is in the 10th decile classification and its smaller subcategory classifications. This factor may not be as relevant if the subject matter company is a very small business that is similar to the companies that populate the 10th subcategories of 10y and 10z.
3. The idea that other factors, specifically liquidity or lack thereof, provide important detail that analysts should consider in the decision to use, or not to use, the CRSP size premium data.

If the valuation assignment is a fair value matter, the analyst should consider research that is intended to illustrate the explanatory factors behind the size premium phenomena. Based on the Torchio study results and liquidity analysis presented in the *Valuation Handbook*, the CRSP size premium data may incorporate an embedded liquidity discount factor.

By using the CRSP size premium data—specifically the for the 10th decile category—an analyst may be incorporating an unintended discount into the valuation assignment. If the embedded liquidity theory holds, the incorporation of an embedded liquidity discount may, at some point, run counter to Delaware Court of Chancery case law regarding fair value.

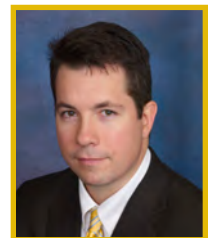
But for now, the application of the implied CRSP size premium to develop a cost of equity is a generally accepted business and security valuation practice.

#### Notes:

1. There are many other cost of equity capital estimation models including (a) the Duff & Phelps, LLC, Risk Premium Report Model; (b) arbitrage pricing theory model; and (c) Fama-French three factor model.
2. CRSP is an acronym for Center for Research in Security Prices. The *Valuation Handbook* is a continuation of the previously produced *SBBI Valuation Yearbook* by Morningstar. The *Valuation Handbook* is produced by Duff & Phelps.
3. Unsystematic risk is defined as the portion of total risk that is specific to an individual security and can be avoided through diversification. Shannon P. Pratt, *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*, 5th ed. (New York: McGraw-Hill, 2008), 1075, Appendix A.
4. CAPM is defined as a model in which the cost of capital for any stock or portfolio of stocks equals a risk-free rate plus a risk premium that is proportionate to the systematic risk of the stock or portfolio. Pratt, *Valuing a Business*, 1070, Appendix A.
5. Beta is defined as a measure of the systematic risk of a stock; the tendency of a stock's price to be correlated with changes in a specific index. Pratt, *Valuing a Business*, 1070, Appendix A.
6. Roger J. Grabowski, "The Size Effect—It Is Still Relevant," *Business Valuation Review* 35, no. 2 (Summer 2016): 63.
7. Rolf W. Banz, "The Relationship between Return and Market Value of Common Stocks," *Journal of Financial Economics* 9 (March 1981): 3–18.
8. Duff & Phelps, *2017 Valuation Handbook: U.S. Guide to Cost of Capital* (New York: John Wiley & Sons, 2017), 2–14.
9. The *Valuation Handbook* presents an alternative size premium analysis, the Risk Premium Report. The Risk Premium Report is not discussed herein.
10. Annual stock market returns represent the combined annual stock returns of stocks listed on the New York Stock Exchange ("NYSE"), NYSE Euronext, and Nasdaq.
11. The standard deviation is a measure that is used to quantify the amount of variation or dispersion of a set of data values. A low standard deviation indicates that the data points tend to be close to the mean of the set, while a high standard deviation indicates that the data points are spread out over a wider range of values. J.M. Bland and D.G. Altman, "Statistics Notes: Measurement Error," *The BMJ* 312 (7047) (September 1996): 1654.
12. Aswath Damodaran, "Equity Risk Premiums (ERP): Determinants, Estimation and

- Implications—The 2015 Edition,” Stern School of Business whitepaper (March 2015): 37.
13. Ibid.
  14. Aswath Damodaran, “The Small Cap Premium: Where Is the Beef?” *Business Valuation Review* 34, no. 4 (Winter 2015): 153.
  15. Joel L. Horowitz, Tim Loughran, and N.E. Savin, “The Disappearing Size Effect,” *Research in Economics* 54, no. 1 (2000): 87.
  16. Ibid.
  17. Ibid., 96.
  18. Duff & Phelps, *2017 Valuation Handbook: U.S. Guide to Cost of Capital*, 4–6.
  19. Grabowski, “The Size Effect—It Is Still Relevant”: 65.
  20. Ibid.
  21. Damodaran, “The Small Cap Premium: Where Is the Beef?”: 154.
  22. Horowitz, Loughran, and Savin, “The Disappearing Size Effect.”
  23. Damodaran, “The Small Cap Premium: Where Is the Beef?”: 154.
  24. Ibid.
  25. Roger Grabowski and Shannon Pratt, *Cost of Capital*, 5th ed. (New York: John Wiley & Sons, 2014), 363.
  26. Horowitz, Loughran, and Savin, “The Disappearing Size Effect”: 87.
  27. Grabowski and Pratt, *Cost of Capital*, 364.
  28. Ibid., 365.
  29. Ibid.
  30. Ibid., 366.
  31. Duff & Phelps, *2017 Valuation Handbook: U.S. Guide to Cost of Capital*, Appendix 3.
  32. Ibid.
  33. Ibid.
  34. Ibid., 4–12.
  35. Ibid., 4–13.
  36. Jim Hitchner, “How to ‘Rig’ a Valuation: The Discount Rate,” *Financial Valuation and Litigation Expert* (February/March 2013).
  37. *2013 Ibbotson SBBi Valuation Yearbook* (Chicago: Morningstar, 2013), 90.
  38. Ibid.
  39. Ibid., 91.
  40. Ibid., 100.
  41. Damodaran, “Equity Risk Premiums (ERP): Determinants, Estimation and Implications—The 2015 Edition”: 12.
  42. Duff & Phelps, *2017 Valuation Handbook: U.S. Guide to Cost of Capital*, 4–21.
  43. Damodaran, “Equity Risk Premiums (ERP): Determinants, Estimation and Implications—The 2015 Edition”: 12.
  44. Yakov Amihud, Haim Mendelson, and Lasse Heje Pedersen, *Market Liquidity, Asset Pricing, Risk, and Crises* (Cambridge: Cambridge University Press, 2013), 103.
  45. Damodaran, “The Small Cap Premium: Where Is the Beef?”
  46. Frank Torchio and Sunita Surana, “Effect of Liquidity on Size Premium and Its Implications for Financial Valuations,” *Journal of Business Valuation and Economic Loss* 9, no. 1 (2014): 55–85.
  47. The Torchio study was based on monthly stock data provided by the CRSP database for the period of 1926 to 2010.
  48. Torchio and Surana, “Effect of Liquidity on Size Premium and its Implications for Financial Valuations”: 77–79.
  49. Ibid.: 77.
  50. *Tri-Continental v. Battye*, 74 A.2d 71, 72 (Del. 1950).
  51. In re Appraisal of DFC Global Corp., C.A. No. 10107-CB, 2016 WL 3753123 (Del. Ch. July 8, 2016), *rev’d and rem’d sub nom.* DFC Global Corporation v. Muirfield Value Partners, L.P., No. 518, 2016, 2017 WL 3261190 (Del. Aug. 1, 2017).
  52. *Gearreald v. Just Care, Inc.*, C.A. No. 5233-VCP, 2012 WL 1569818 at \*10 (Del. Ch. Apr. 30, 2012).
  53. Id.
  54. Id. at \*11, citing *Borruso v. Communications Telesystems International*, 753 A.2d 451, 460 (Del. Ch. 1999).
  55. Id. at \*10
  56. Id. at \*11
  57. Id., citing *Cede & Co. v. JRC Acquisition Corp.*, No. Civ.A. 18648-NC, 2004 WL 286963 at \*9 (Del. Ch. Feb. 10, 2004).
  58. Id.
  59. Id.
  60. Id. at \*12.
  61. *Merlin Partners LP and AAMAF, LP, v. AutoInfo, Inc.*, C.A. No. 8509-VCN, 2015 WL 2069417 at \*15 (Del. Ch. Apr. 30, 2015).
  62. Id.
  63. Id.
  64. Id.
  65. Id.
  66. In re Appraisal of DFC Global Corp., 2016 WL 3753123 at \*12.
  67. The Duff & Phelps Risk Premium Report size-related statistics exclude financial services businesses.
  68. In re Appraisal of DFC Global Corp., 2016 WL 3753123 at \*12.
  69. Id. at \*14.
  70. *Merion Capital L.P. and Merion Capital II L.P., v. Lender Processing Services, Inc.*, C.A. No. 9320-VCL, 2016 WL 7324170 at \*29 (Del. Ch. Dec. 16, 2016).
  71. Id.
  72. *Dunmire v. Farmers & Merchants Bancorp of Western Pennsylvania, Inc.*, C.A. No. 10589-CB, 2016 WL 6651411, n.139 (Del. Ch. Nov. 10, 2016).

Kevin M. Zanni is a director in our Chicago office. He can be reached at (773) 399-4333 or at [kmsanni@willamette.com](mailto:kmsanni@willamette.com).



## On Our Web Site

### Recent Articles and Presentations

John Ramirez, a vice president of our firm in our Portland office, and Casey Karlsen, an associate in our Portland office, authored an article that appeared in the September 2017 issue of *Journal of Multistate Taxation and Incentives*. The title of their article is “Extracting Relevant Pricing Data from Market-Based Evidence.”

Valuation analysts often rely on market evidence in order to estimate the value of a taxpayer’s industrial or commercial property for ad valorem property tax purposes. John and Casey explore common uses of market evidence in each of the three generally accepted property valuation approaches. They examine relevant comparability factors for analysts to consider when extracting pricing data from market-based evidence.

Robert Reilly, a managing director of our firm, delivered a presentation to the American Institute of Certified Public Accountants (AICPA) National Advanced Accounting and Auditing Technical Symposium, which was held in Las Vegas on June 13, 2017. The topic of Robert’s presentation was “Identification and Valuation of Acquired Intangible Assets for ASC 805 Business Combination Purposes.”

Robert’s presentation explored the identification of intangible assets, due diligence and data gathering procedures, generally accepted intangible asset valuation approaches and methods, and valuation synthesis and conclusion procedures. He provided examples of the three generally accepted intangible asset valuation approaches.

John Ramirez and Casey Karlsen delivered a presentation to the 47th Annual Taxation Conference: Appraisal for Ad Valorem

Taxation of Communications, Energy, and Transportation Properties, which was held in Wichita, Kansas, July 23-27, 2017. The topic of John and Casey’s presentation was “Market Approach Methods: Extracting Pricing Data from Market Evidence.”

A significant area of controversy in the application of the market approach to unit principle valuation is the selection of guideline publicly traded companies and guideline sale transactions. John and Casey provided an introduction to the stock and debt method and the guideline sale transaction method. They explored data sources for identifying guideline companies and guideline transactions and discussed the strengths and weaknesses of each source. They also discussed comparability criteria for selecting guideline companies and guideline transactions.

Justin Nielsen, a vice president of our firm in our Portland office, authored an article that appeared in the March/April 2017 issue of the *San Diego Lawyer* magazine. The title of Justin’s article is “Calculation Engagement v. Valuation Engagement in Marital Dissolution: Insight from a Valuation Analyst.”

Justin explores the two types of valuation engagements that are included in the AICPA Statement on Standards for Valuation Services (SSVS) VS100: (1) a calculation engagement and (2) a valuation engagement. Justin discusses several scenarios in which these two types of engagements may be employed. He briefly reviews the differences between the two levels of engagements.

These and many other articles and presentations may be found at [www.willamette.com/resources\\_presentations.html](http://www.willamette.com/resources_presentations.html).

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# Communiqué

## IN PRINT

Robert Reilly, firm managing director, authored an article that appeared in the Summer 2017 issue of the *American Journal of Family Law*. The title of Robert's article was "The Asset-Based Approach to Business Valuation in Family Law (Part I of III)."

Robert Reilly also authored an article that was published in the Summer 2017 issue of *The Practical Tax Lawyer*. The title of Robert's article was "What Tax Lawyers Need to Know About Unit Valuations, Summation Valuations, and Business Valuations for Property Tax Purposes."

Robert Reilly also authored an article that was published in the June 2017 issue of *The Practical Lawyer*. The title of Robert's article was "What Lawyer's Need to Know About the Asset-Based Business Valuation Approach."

Robert Reilly also authored an article that was published in the May 2017 issue of *Practical Tax Strategies*. The title of Robert's article was "The Asset-Based Approach in Tax-Related Business Valuations; Part Two."

Robert Reilly also authored an article that was published in the March/April 2017 issue of *Construction Accounting and Taxation*. The title of Robert's article was "Construction Company Valuation—The Adjusted Net Asset Value Method."

Robert Reilly also authored an article that was published in the July/August 2017 issue of *Construction Accounting and Taxation*. The title of Robert's article was "Differences between Business Valuations, Unit Valuations, and Summation Valuations in the Construction Industry: Part I."

Justin Nielsen, Portland office vice president, authored an article that appeared in the March/April 2017 issue of the *San Diego Lawyer*. The title of Justin's article was "Calculation Engagement v. Valuation Engagement in Marital Dissolution: Insights from a Valuation Analyst."

## IN PERSON

Robert Reilly addressed the American Institute of Certified Public Accountants National Advanced Accounting and Auditing Technical Symposium held in Las Vegas on June 13, 2017. The topic of Robert's presentation was "Identification and Valuation of Acquired Intangible Assets for ASC 805 Business Combination Purposes."

Robert Reilly addressed the Virginia Society of Certified Public Accountants annual business valuation conference held in Richmond, Virginia, on September 19, 2017. The topic of Robert's presentation was the "Application of the Asset-Based Approach to Business Valuation."

Robert Schweihs, firm managing director, will address the Indiana Certified Public Accountant Society Business Valuation Conference held in Indianapolis, Indiana, on October 25, 2017. The two topics that Bob will present are "Valuing Identifiable Intangible Assets for Financial Statement Reporting Purposes" and "Intangible Asset Economic Damages Analysis."

Curtis Kimball, Atlanta office managing director, addressed the National Trust Closely Held Business Association Annual Conference in Milwaukee, Wisconsin, on September 13, 2017. Curt served as a panelist for the "Valuation Topics Roundtable" presentation.

Charles Wilhoite, Portland office managing director, addressed the University of Washington Masters in Public Accounting Fair Value Measurement program in Seattle, Washington on April 19, 2017. The presentation was titled, "Implementing the Market Approach Using the Guideline Publicly Traded Company Method."

Charles Wilhoite participated as a panelist on May 12, 2017, for the State Bar of Arizona continuing legal education seminar titled, "Honey, I Shrunk the Documents" in Phoenix, Arizona.

Charles Wilhoite delivered a presentation titled, “Financial Expert Support in Dispute Resolution” to the litigation department of Garvey Schubert Barer on June 7, 2017, in Portland, Oregon.

Charles Wilhoite delivered a presentation titled, “Cash is Fine—Inspiring and Receiving Gifts,” to the Northwest Planned Giving Roundtable on July 21, 2017, in Portland, Oregon.

Charles Wilhoite delivered a presentation to the Arizona State University law school regarding community property in September 2017.

John Ramirez, vice president in our Portland, Oregon, office and Casey Karlsen, an associate in our Portland office, delivered a presentation at the 47th Annual Appraisal for Ad Valorem Taxation Conference held at Wichita State University on July 26, 2017. The topic of John and Casey’s presentation was “Market Approach Methods: Extracting Pricing Data from Market Evidence.”

Robert Reilly also delivered two presentations at the Wichita State University Appraisal for Ad Valorem Taxation Conference held from July 23 through 27, 2017. The title of Robert’s first presentation was “Income Tax Considerations in Unit Principle Valuations.” The title of Robert’s second presentation was “Flotation Cost Considerations in Unit Principle Valuations.”

Robert Reilly will address the American Society of Appraiser’s annual Advanced Business Valuation Conference held in Houston, Texas, on October 10, 2017. The topic of Robert’s presentation will be “Intellectual Property Valuation Approaches, Methods, and Procedures.”

## ENCOMIUM

Tim Meinhart, Chicago office managing director, was appointed to the Business Valuation Education Subcommittee of the American Society of Appraisers.

Charles Wilhoite was appointed by Oregon Governor Kate Brown on May 31, 2017, to serve on the seven-member PERS UAL (unfunded actuarial liability) Task Force. The Task Force is charged with designing strategies to eliminate \$5 billion of an estimated \$22 billion in unfunded actuarial liability associated with Oregon’s public employee retirement system.

Charles Wilhoite was featured as “Storyteller-in-Chief” in the July/August 2017 issue of *Oregon Business* magazine.

Kevin Zanni, Chicago office director, was elected to serve as the president of the Business Valuation Association of Chicago.

## DELAWARE APPRAISAL RIGHTS PROCEEDINGS

*Continued from Page 56*

### Notes:

1. Union Illinois 1995 Investment Limited Partnership v. Union Financial Group Ltd., 847 A.2d 340 (Del. Ch. 2003).
2. “Shareholder Litigation Involving Acquisitions of Public Companies,” Cornerstone Research (2016): 1
3. In Re PetSmart, Inc., No. 10782, 2017 WL 2303599 at \*2 (Del. Ch. May 26, 2017).
4. Id.
5. Id. at \*12.
6. Id. at \*22.
7. Id. at \*35.
8. Union Illinois 1995 Investment Limited Partnership v. Union Financial Group Ltd., 847 A.2d 340.
9. In Re PetSmart, Inc., 2017 WL 2303599 at \*40.
10. John Douglas Dunmire v. Farmers & Merchants Bancorp of Western Pennsylvania, Inc., No. 10589-CB, 2016 WL 6651411 at \*1 (Del. Ch. Nov. 10, 2016).
11. Id.
12. Id.
13. Id. at \*7.
14. Id.
15. Id. at \*8.
16. Id., citing Olson v. EV3, Inc., No. 5583-VCG, 2011 WL 704409 at \*10 (Del. Ch. Feb. 21, 2011).
17. Id. at \*9.
18. Id. at \*11.
19. Id. at \*11-12.
20. Id. at \*12.
21. Id. at \*13.
22. Id. at \*15.
23. In Re SWS Group, Inc., No. 10554-VCG, 2017 WL 2334852 at \*1 (Del. Ch. May 30, 2017).
24. Id. at \*5.
25. Id. at \*8.
26. Id. at \*10.
27. Id. at \*11.
28. Id. at \*13.
29. Id.
30. Id. at \*14.
31. Id. at \*16.
32. Id.

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