

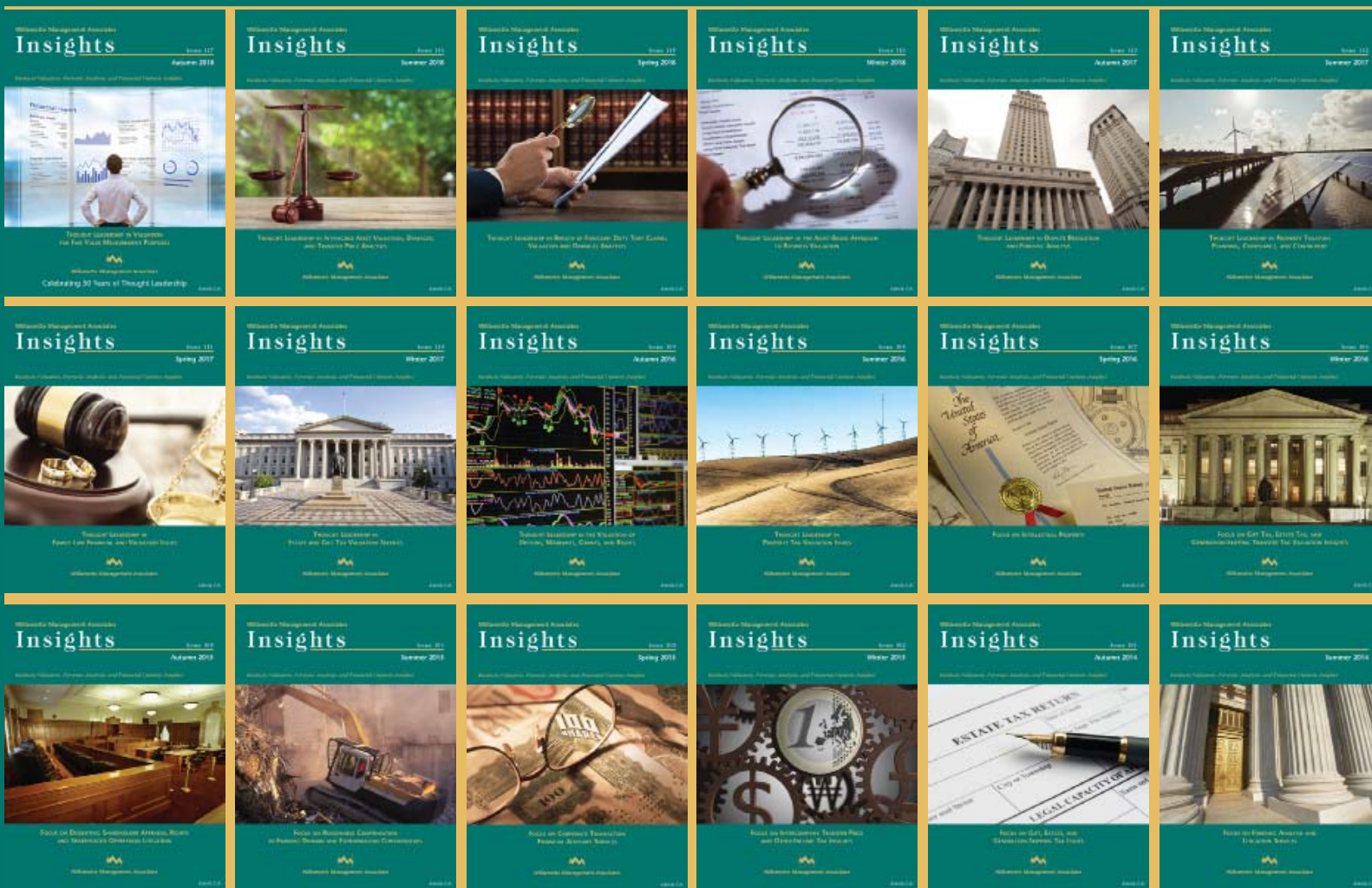
Willamette Management Associates

# Insights

Issue 118

Quinquagenary Issue 2018

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



**50 YEARS OF THOUGHT LEADERSHIP IN VALUATION ANALYSIS,  
ECONOMIC DAMAGES ANALYSIS, AND TRANSFER PRICE ANALYSIS**



Willamette Management Associates

Celebrating 50 Years of Thought Leadership

\$10.00 U.S.



**Willamette Management Associates**  
*Thought Leadership*

**Celebrating 50 Years of Thought Leadership!**

# Insights

*Insights*, the thought leadership 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* thought leadership 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.

The views and opinions presented in *Insights* are those of the individual authors. They are not necessarily the positions of Willamette Management Associates or its employees.

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

Annual subscriptions to *Insights* are available at \$40. Single copies of current issues are \$10. Single copies of back issues are \$250. The cumulative collection of the 1991–2016 issues of *Insights* are \$2,500. Single reprints of current articles authored by Willamette Management Associates analysts are complimentary. Single reprints of noncurrent articles authored by Willamette Management Associates analysts are available at \$100.

## INSIGHTS EDITORS AND STAFF

Robert Schweihs  
Managing Editor  
rpschweihs@willamette.com

Charlene Blalock  
Editor  
cmlalock@willamette.com

Mary McCallister  
Production Editor  
mmccallister@willamette.com

Mark Abbey  
Business Manager  
mfabbey@willamette.com

Debi Quinlivan  
Accountant  
dlquinlivan@willamette.com

Michael Amoroso  
Financial Analyst  
mcamoroso@willamette.com

## EDITORIAL BOARD

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tgwhitehead@willamette.com

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**FIFTY YEARS OF THOUGHT LEADERSHIP IN  
VALUATION ANALYSIS, ECONOMIC DAMAGES ANALYSIS, AND TRANSFER PRICE ANALYSIS  
EDITOR FOR THIS ISSUE: ROBERT F. REILLY, CPA**

**Willamette Management Associates Insights**

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**Celebrating Fifty Years of Thought Leadership  
1969–2019**

## About the Editor



### Robert F. Reilly, CPA

I want to change the format of the About the Editor column in this *Insights* issue. In all previous *Insights* issues, this column is written in the third person. Nonetheless, the columns are actually written by the editors themselves. Since this is the 50th anniversary edi-

tion of *Insights*, I want to write this column in the first person. If I am going to write a page full of unabashed self-aggrandizement, I should be transparent about it.

I am proud to serve as the editor of this special issue of *Insights*.

I am honored to be associated with several professional associations over the years. I have most enjoyed my service to the American Institute of Certified Public Accountants (“AICPA”). I have served on the Accredited in Business Valuation (“ABV”) examination committee and the Business Valuation Committee. I have served on the Consulting Services Executive Committee and the Forensic and Valuation Services Executive Committee.

Many years ago now, I was involved in the development of the ABV credential program and in the development of the AICPA professional valuation standards—ultimately called *Statement on Standards for Valuation Services*. As part of my volunteer service, I have chaired the AICPA annual valuation conference, and I have regularly presented at AICPA valuation, forensic services, and other professional conferences. I have been involved with the writing and reviewing of various AICPA white papers, practice aids, and other professional guidance.

I was named an AICPA volunteer of the year twice. And, I was inducted into the AICPA valuation hall of fame—which was a singular honor for me. I have the highest respect and admiration for the AICPA staff members and other member volunteers I have served with over the last 40 years or so.

I am also proud to be a member of the National Association of Certified Valuators and Analysts (“NACVA”). I recently received the NACVA outstanding member of the year award. I have enjoyed my contributions to NACVA over the years, which include developing and presenting continuing education courses and programs, presenting at confer-

ences and professional credential training programs, and authoring for various NACVA valuation and litigation journals and publications.

I have also enjoyed my avocation of authorship over the past 43 years. Although it is really time consuming work, I enjoy writing as a hobby. I have coauthored or coedited 12 valuation-related textbooks over my career. Many of these books have received “book of the year” awards from the Institute of Business Appraisers, the American Bankruptcy Institute, or other professional organizations. I have authored over 40 textbook chapters over my career. And I have authored almost 900 professional journal articles over my career.

I hope these contributions to the professional literature have expanded the body of knowledge and have benefited the valuation, damages, and transfer price disciplines.

I appreciate the travel I have experienced over the years. Of course, I have traveled domestically and internationally for client engagements. In particular, I have been honored to provide testifying expert services before courts and tribunals in the United States—and in Canada, England, Ireland, Australia, and the Netherlands.

I also enjoyed travel related to professional conference presentations. I have presented speeches, seminars, and symposiums at conferences in Canada, Australia, Russia, Bulgaria, and Yugoslavia (back when there was a Yugoslavia).

Finally, I am grounded by my family. My Willamette curriculum vitae (“CV”) says that I hold a bachelors degree in economics from Columbia College and an MBA degree in finance from the Columbia University Graduate School of Business. That CV does not mention my greatest achievement at Columbia University: I convinced my wife Janet to marry me while we were both undergraduates.

And, the Willamette CV does not mention the academic degree that means the most to me. I hold a PhT degree from the University of Cincinnati College of Medicine. It is the only diploma that hangs in my office. I was awarded that Putting Him/Her Through degree in an actual graduation ceremony on the same day Janet received her MD degree from that institution. All I had to do to earn that diploma was to be married to an MD candidate for all four years of medical school. In 2019, Janet will attend her 40th reunion at the University of Cincinnati medical school—and we will celebrate our 44th wedding anniversary.



## Quinquagenary of Thought Leadership

I am going to depart slightly from the typical format of the Forethoughts column and write this column in the first person. In the typical Forethoughts column, the *Insights* issue editor summarizes the contents of that particular issue. This particular Forethoughts column may require a little more fulsome explanation.

This year represents the 50th anniversary—the quinquagenary—for Willamette Management Associates. Accordingly, this *Insights* issue represents our 50th anniversary issue.

Since its inception in 1969, our firm has been involved in publishing. Originally, we published investment newsletters and security analyst reports. These publications related to the firm's original services of money management and investment advisory services.

The firm started to publish *Insights* as a quarterly journal in 1991. Since 1991, we have published well over 100 issues of *Insights*. This issue may be considered a “Best of *Insights*” issue. That is, a previous version of each discussion presented in this issue was published in an earlier *Insights* issue.

I reviewed each *Insights* issue published during the last 28 years. I selected discussions that were representative of the firm's three principal categories of professional services: valuation analyses, economic damages analyses, and transfer pricing analyses. And, I selected individual discussions within each of these general categories that are representative of both our firm's historical client emphasis and our firm's current client focus.

With regard to the valuation analysis category, I selected discussions related to the following:

1. Gift tax and estate tax valuation issues
2. ESOP and ERISA valuation issues
3. Independent financial advisory due diligence valuation issues

With regard to the economic damages analysis category, I selected discussions related to the following:

1. Tort-related shareholder litigation damages analysis procedures
2. Tangible property, intangible property, and contract rights deprivation analyses

With regard to the transfer price analysis category, I selected discussions related to the following:

1. Tangible property and intangible property international tax transfer pricing methods

2. Intellectual property holding company state income tax transfer pricing methods

Versions of each of the discussions were originally published in previous *Insights* editions. Most of the discussions were originally published in the 1990s and early 2000s. However, I want to emphasize that I substantially edited, updated, and expanded each of those earlier discussions. The discussions presented in this *Insights* issue represented then-current thought leadership in earlier decades. In addition, the revised and expanded discussions presented in this *Insights* issue represent current thought leadership on the subject topics.

I am proud that Willamette Management Associates is celebrating its 50th anniversary. Within the firm, we do not believe that we have completed our first 50 years. Rather, we believe that we have started our second 50 years.

I am proud that our firm is not just celebrating 50 years of corporate existence. We are celebrating 50 years of thought leadership. We have provided 50 years of thought leadership to our clients. And, we have provided 50 years of thought leadership to the valuation analysis, damages analysis, and transfer price analysis profession.

I am proud of the thought leadership regularly presented in *Insights*. My partner Bob Schweihs and I joined Willamette Management Associates in early 1991. One of the first things we did as firm managing directors was to start publishing *Insights* as a technical journal for the firm's clients and friends. So, I had 28 years of *Insights* issues available to me from which to select the manuscripts for this 50th anniversary issue.

I am privileged to serve as a firm leader for my colleagues. My colleagues challenge me every day. They are not just bright. They are brilliant. They are not just hard working. They are tireless. They are not just innovative. They are inspired. Sometimes it is hard to lead such a creative group—when I am always running to keep up.

I hope you enjoy this quinquagenary issue of *Insights*. I hope you find the thought leadership discussions presented herein to be both interesting and useful. And, I hope you join my colleagues and me as we celebrate our firm's quinquagenary—and as we look forward to our centennial.

Robert F. Reilly

# ESOP Sponsor Company Stock Valuation and Independent Financial Advisor Due Diligence Procedure Checklist

*Valuation analysts (“analysts”) and independent financial advisers (“advisers”) are often asked to opine on transactions involving an employee stock ownership plan (“ESOP”) and the ESOP sponsor company stock. These transactions may include the purchase, sale, contribution, or other transfer of the sponsor company stock. In the case of a proposed stock purchase transaction, the ESOP may request an opinion that the ESOP trust is not paying more than adequate consideration for the sponsor company stock. In the case of a proposed stock sale transaction, the ESOP may request an opinion that the ESOP trustee is not receiving less than adequate consideration for the sponsor company stock. Accordingly, before approving the sponsor company stock transaction, the ESOP trustee (or any other ESOP fiduciary) may request an independent valuation opinion or an independent financial adviser transaction fairness opinion. This discussion presents a checklist of procedures that analysts and advisers may consider in developing their transactional analyses and in reporting their transaction opinions. This checklist includes both business valuation procedures that analysts may consider in performing the stock valuation and due diligence procedures that advisers may consider in preparing the transaction fairness opinion.*

*The original version of this discussion was published in the spring 1996 issue of Insights under the title “ESOP Valuation and Financial Advisory Due Diligence Checklist.” Robert F. Reilly, CPA, and Steven D. Garber were the authors of the original discussion.*

## INTRODUCTION

The Employee Retirement Income Securities Act (hereinafter “ERISA”) provides that a sponsor company employee stock ownership plan (hereinafter “ESOP”) may pay no more than “adequate consideration” for the purchase of the sponsor company stock. Such sponsor company stock may include, for example, (1) common stock or (2) convertible preferred stock.

With regard to the ESOP purchase or sale of the sponsor company securities, the ERISA adequate consideration provisions have two general components:

1. A fair market value pricing determination component
2. A transactional good faith process component

The ERISA adequate consideration provisions require that the ESOP trustee (and other ESOP fiduciaries) should determine—in good faith—the fair market value of the sponsor company stock involved in the proposed purchase or sale transaction. This determination should be made in compliance with the applicable regulations issued by both (1) the Internal Revenue Service and (2) the United States Department of Labor.

This discussion presents a checklist that may be considered by valuation analysts (“analysts”) both in the development of a sponsor company stock valuation and in the reporting of the transaction-related sponsor company stock valuation.

In addition, this checklist may be considered by independent financial advisers (“advisers”) in the performance of a financial advisory due diligence analysis with regard to the pending stock purchase or stock sale transaction. Such a financial advisory analysis may be performed prior to the issuance of a transaction fairness opinion related to the sponsor company stock purchase or stock sale. The analyst and the adviser may be the same person.

This checklist may also be considered by an ESOP trustee or by any other ESOP fiduciary in the good faith assessment of an ESOP sponsor company stock valuation and/or of a financial advisory transaction fairness opinion. This checklist may also be considered by an ESOP administrator or by any other ESOP adviser (e.g., legal counsel, accountant, etc.) who may rely on ESOP sponsor company stock valuations.

As with any standardized procedure checklist, analysts, advisers, trustees, or other ESOP-related parties should exercise caution in the application of this checklist. This caution should be considered before this checklist (or any other procedure checklist) is applied in:

1. an ESOP-related sponsor company stock valuation or
2. an ESOP-related transaction financial advisory due diligence.

These application and reliance cautions are further discussed below.

## TRANSACTIONS INVOLVING AN OPINION OF ADEQUATE CONSIDERATION

The following list summarizes many of the typical forms of transactions involving an ESOP and the employer corporation securities. These types of ESOP sponsor company stock purchase or sale transactions often require the assessment of adequate consideration:

- A contribution of the sponsor company stock to the ESOP
- A purchase of the sponsor company stock by the ESOP



- The finalization of the ESOP sponsor company stock acquisition loan
- A contribution of cash to the ESOP, where the cash is then used to buy the sponsor company stock (either directly from the sponsor company or from other sponsor company shareholders)
- The assessment of an unsolicited purchase offer (from, say, a sponsor company acquirer) for the ESOP-owned sponsor company stock
- The purchase of the ESOP-owned sponsor company stock by a sponsor company acquirer
- The distribution of cash to the ESOP participants in place of a distribution of the sponsor company stock

In each of these types of sponsor company stock transactions, the ESOP trustee or other ESOP fiduciary should address the adequate consideration of the proposed transaction. The procedure checklist presented in this discussion is intended to be useful to analysts, advisers, trustees, and other ESOP-related parties in the assessment of adequate consideration related to the pending transaction.

## STOCK VALUATION OPINIONS AND TRANSACTION FAIRNESS OPINIONS

As part of the adequate consideration assessment process, the fair market value of the sponsor company stock should be estimated as of the date of the

ESOP purchase or sale of the employer corporation securities. This fair market value estimation is typically documented and reported in a sponsor company stock valuation opinion.

The procedure checklist presented in this discussion is intended to assist the analyst in the development and reporting of the sponsor company stock fair market value valuation.

Some transactions involving ESOP-owned securities also involve an assessment of the fairness—from a financial perspective—of the proposed stock purchase or sale transaction. This statement is particularly true in the case of multi-investor stock purchase or sale transactions. In these cases, an adviser will typically perform a financial advisory due diligence exercise—and issue a transaction fairness opinion.

The procedure checklist presented in this discussion is also intended to be useful in the assessment of transactional fairness.

## CONSIDERATIONS REGARDING THE PROCEDURE CHECKLIST

It is important for analysts, advisers, and other ESOP-related parties to consider the many limitations regarding the application of any standardized procedure checklist. This cautionary statement is true whether the procedure checklist applies to either (1) a sponsor company stock valuation or (2) a financial advisory transaction due diligence analysis.

First, the procedure checklist should never substitute for the analyst or the adviser (or the ESOP trustee) independent professional judgment.

Second, no procedure checklist can be comprehensive and all-inclusive. For example, the following procedure checklist does not discuss every generally accepted sponsor company stock valuation method—but only the more common sponsor company stock valuation methods.

Third, the terminology used in the procedure checklist may be subject to different interpretations. For example, the checklist refers to “valuation premiums and discounts”; the experienced analyst or adviser will understand that this term includes consideration of all related valuation factors, such as: the discount for lack of marketability, the effects of the ESOP sponsor stock repurchase liability, the discount for lack of ownership control/premium for ownership control, and the effects of financial leverage.

Fourth, this procedure checklist does not include a complete consideration of all of the possible aspects of:

1. an ESOP sponsor company leveraged stock transaction or
2. an ESOP sponsor company leveraged stock valuation.

Fifth, this procedure checklist assumes that the valuation subject is the stock of a private corporation sponsor company—that is, the indicated valuation procedures assume that there is no organized or efficient secondary market for the sponsor company securities.

Finally, this procedure checklist primarily relates to the business valuation process and the financial adviser due diligence process—and not to the content or format of the stock valuation report or the financial adviser fairness opinion. Therefore, this procedure checklist does not include a “table of contents” for:

1. an ESOP stock valuation report or
2. an ESOP transaction fairness opinion.

However, since this content is an important issue to parties who rely on the ESOP stock valuation report, any written ESOP sponsor company stock valuation report should include an assessment of the following factors:

1. The nature of the subject business and the history of the sponsor company
2. The economic outlook and the condition and outlook of the specific industry in which the sponsor company operates
3. The book value of the sponsor company stock and the financial condition of the sponsor company business
4. The earnings capacity of the sponsor company
5. The dividend-paying capacity of the sponsor company
6. Whether or not the sponsor company has goodwill or other identifiable intangible asset value
7. The market price of securities of corporations engaged in the same or a similar line of business that are actively traded on an organized stock market
8. The marketability, or lack thereof, of the sponsor company stock
9. Whether or not the seller would be able to obtain an ownership control price premium with regard to the sale of the sponsor company stock



## THE PROCEDURE CHECKLIST IS NOT A STOCK VALUATION OR FAIRNESS OPINION SCORE CARD

This procedure checklist should not be used to derive a quantitative score used to review or evaluate a sponsor company stock valuation or financial adviser transaction opinion.

That is, the fact that an individual analysis does not receive a “score” of 100 does not indicate that the analysis is not in compliance with promulgated regulations or with generally accepted professional standards. Such an analysis may still be consistent with generally accepted professional standards and practices.

And, such an analysis may provide the appropriate basis upon which the ESOP trustee may assess adequate consideration within the context of a pending sponsor company stock purchase or sale transaction.

Likewise, the fact that an individual analysis may receive a high “score” does not necessarily indicate that the analysis is prepared in compliance with all promulgated regulations and generally accepted professional standards. Such an analysis may still be inconsistent with professional standards and practices. And, such an analysis may be an inadequate basis upon which the ESOP trustee may assess adequate consideration within the context of a pending sponsor company stock purchase or sale transaction.

The procedure checklist presented in this discussion is intended to provide a guide that analysts and advisers—and ESOP fiduciaries—can use as a reminder in the development of sponsor company stock valuations and/or transaction fairness opinion.

The procedure checklist may be used to document whether the appropriate analytical procedures were (or were not) performed. But this checklist will not evaluate the analytical quality and the professional judgment involved in the performance of the actual procedures.



## SUMMARY AND CONCLUSION

The procedure checklist that accompanies this discussion lists the generally accepted procedures that are performed during an analytical process. That process is involved in either a sponsor company stock valuation or a financial adviser transaction fairness opinion.

The procedure checklist is presented to provide practical guidance to analysts and advisers, to ESOP fiduciaries, and to other ESOP-related parties. The checklist may be useful in the conduct of the stock valuation or the financial adviser fairness opinion. The checklist may also be useful in the analyst’s or the adviser’s internal quality control review of:

1. the sponsor company stock valuation report or
2. the sponsor company stock purchase or sale transaction fairness opinion.

Of course, the procedure checklist presented in this discussion should not be used as a substitute for the professional experience and the reasoned judgment of the analyst or the adviser. In addition, the procedure checklist should not be used as a substitute for the good faith due diligence, prudence, and professional care of the ESOP trustee or other ESOP fiduciary.

## Procedural Guidance for a Sponsor Company Stock Valuation and Financial Advisor Transaction Opinion Due Diligence Process

| Item | Yes                      | No                       | NA                       | Work Paper Reference | Procedure  |
|------|--------------------------|--------------------------|--------------------------|----------------------|--|
|      |                          |                          |                          |                      | I. <u>Engagement letter and/or engagement work product</u>   |
| 1.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                | A. State the purpose and objective of the engagement   |
| 2.   |                          |                          |                          |                      | 1. Identify the purpose (fairness opinion, annual sponsor company stock valuation, etc.)   |
| 3.   |                          |                          |                          |                      | 2. Identify the objective (estimate the fair market value of the ESOP ownership interest, etc.)  |
| 4.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                | B. Define the business/security valuation or the financial adviser assignment  |
| 5.   |                          |                          |                          |                      | 1. Identify the retaining party  |
| 6.   |                          |                          |                          |                      | 2. Identify the entity subject to the analysis   |
| 7.   |                          |                          |                          |                      | 3. Identify any pending transaction that is the subject of the analysis  |
| 8.   |                          |                          |                          |                      | 4. Identify the current legal and income taxation form of the subject organization (C corporation, S corporation, limited partnership, etc.)   |
| 9.   |                          |                          |                          |                      | a. List the state of incorporation   |
| 10.  |                          |                          |                          |                      | b. List the date of incorporation  |
| 11.  |                          |                          |                          |                      | 5. Identify the specific ownership interest subject to the analysis  |
| 12.  |                          |                          |                          |                      | 6. Identify the valuation date or transaction fairness date (the "as of" date of the analysis)   |
| 13.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                | C. Document the standard of value and the premise of value to be applied   |
| 14.  |                          |                          |                          |                      | 1. Identify and define the appropriate standard of value (fair market value, fair value, investment value, etc.)   |
| 15.  |                          |                          |                          |                      | 2. Identify and define the appropriate premise of value—based on the assignment instruction or on the analyst's highest and best use consideration (value in use as a going-concern business, value in exchange as an orderly disposition of assets, etc.) |
|      |                          |                          |                          |                      | II. <u>Due diligence collection of data</u>  |
| 16.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                | A. Collect and review sponsor company documents and information  |
| 17.  |                          |                          |                          |                      | 1. Request financial information (typically for the prior 5 years and the latest 12-month interim financial statements)  |
| 18.  |                          |                          |                          |                      | a. Request income statements   |
| 19.  |                          |                          |                          |                      | b. Request balance sheets  |
| 20.  |                          |                          |                          |                      | c. Request statements of cash flow   |
| 21.  |                          |                          |                          |                      | d. Request capital statements  |
| 22.  |                          |                          |                          |                      | e. Request explanatory financial statement footnotes, explanation of accounting principles, and supplemental disclosures to the financial statements   |
| 23.  |                          |                          |                          |                      | 2. Request a list of subsidiaries (consolidated or not) and/or financial ownership interests in other companies (including relevant historical financial information)  |
| 24.  |                          |                          |                          |                      | 3. Request other relevant financial information  |
| 25.  |                          |                          |                          |                      | a. Request all financial budgets, plans, projections, or forecasts prepared as of the analysis date  |

**Procedural Guidance for a Sponsor Company Stock Valuation and  
Financial Advisor Transaction Opinion Due Diligence Process (cont.)**

| Item | Yes | No | NA | Work<br>Paper<br>Reference | Procedure  |
|------|-----|----|----|----------------------------|--|
| 26.  |     |    |    |                            | b. Request all financial budgets, plans, projections, or forecasts prepared at any time during the five-year period prior to the analysis date   |
| 27.  |     |    |    |                            | c. Request other financial schedules (accumulated depreciation, inventory, accounts receivable, accounts payable, open purchase orders, production backlog, etc.)                          |
| 28.  |     |    |    |                            | d. Request copies of any existing contracts/leases (employment agreements, noncompete agreements, labor agreements, customer contracts, supplier agreements, real estate leases, etc.)     |
| 29.  |     |    |    |                            | e. Request amounts and descriptions of any insurance in force (key person, property/casualty, etc.)  |
| 30.  |     |    |    |                            | f. Request a compensation schedule for senior management and for any employee/owners included in senior management (salary, stock options, etc.)   |
| 31.  |     |    |    |                            | g. Request prior business, stock, or property valuation reports (prepared for any purpose during the five-year period prior to the analysis date)  |
| 32.  |     |    |    |                            | h. Request a schedule of dividends paid during the prior five-year period  |
| 33.  |     |    |    |                            | 4. Request copies of any sponsor company financing documents   |
| 34.  |     |    |    |                            | a. Request copies of all public debt indenture agreements  |
| 35.  |     |    |    |                            | b. Request copies of all private debt indenture agreements   |
| 36.  |     |    |    |                            | c. Request any schedule of weighted average debt interest rates  |
| 37.  |     |    |    |                            | d. Request any schedule of debt service payments during the prior five-year period   |
| 38.  |     |    |    |                            | e. Request any schedule of required debt service payments over the term of the longest term debt repayment period  |
| 39.  |     |    |    |                            | 5. Request copies of any sponsor company legal documents   |
| 40.  |     |    |    |                            | a. Request articles of incorporation, bylaws, amendments to each, etc.   |
| 41.  |     |    |    |                            | b. Request any existing buy-sell agreements, options, rights of first refusal, etc.  |
| 42.  |     |    |    |                            | c. Request minutes from shareholders' meetings during the prior five-year period   |
| 43.  |     |    |    |                            | d. Request a list of all stockholders as of the analysis date  |
| 44.  |     |    |    |                            | 1) Number of shares owned by each stockholder  |
| 45.  |     |    |    |                            | 2) Number of shares owned by senior management and employee/owners involved in senior management   |
| 46.  |     |    |    |                            | e. Request descriptions of all recent prior transactions of the subject stock and any recent bona fide offers to purchase the sponsor company and/or any of the sponsor company securities |
| 47.  |     |    |    |                            | f. Request any ESOP-related stock ownership transaction and any ESOP trust documents, including:   |
| 48.  |     |    |    |                            | 1) ESOP-related employer stock acquisition loan agreements   |

## Procedural Guidance for a Sponsor Company Stock Valuation and Financial Advisor Transaction Opinion Due Diligence Process (cont.)

| Item | Yes                      | No                       | NA                       | Work<br>Paper<br>Reference | Procedure  |
|------|--------------------------|--------------------------|--------------------------|----------------------------|--|
| 49.  |                          |                          |                          |                            | 2) Sponsor company stock purchase agreements   |
| 50.  |                          |                          |                          |                            | 3) ESOP plan and ESOP trust documents (with all amendments) in place as of the analysis date   |
| 51.  |                          |                          |                          |                            | 4) Other documents that may impact the rights of the holder of the sponsor company securities  |
| 52.  |                          |                          |                          |                            | 6. Request other relevant operational information  |
| 53.  |                          |                          |                          |                            | a. Request history and description of the sponsor company business   |
| 54.  |                          |                          |                          |                            | b. Request copies of sales/marketing materials   |
| 55.  |                          |                          |                          |                            | c. Request locations in which the sponsor company operates   |
| 56.  |                          |                          |                          |                            | d. Request major customers by annual dollar volume   |
| 57.  |                          |                          |                          |                            | e. Request major suppliers by annual dollar volume   |
| 58.  |                          |                          |                          |                            | f. Request major competitors (and size and/or market share, if available)  |
| 59.  |                          |                          |                          |                            | g. Request a breakdown of personnel (by department or function) and resumes of the senior management   |
| 60.  |                          |                          |                          |                            | h. Request a description of all patents, trademarks, copyrights, and other owned/licensed intellectual property  |
| 61.  |                          |                          |                          |                            | i. Request a description of any identifiable intangible assets not recorded on the sponsor company balance sheet   |
| 62.  |                          |                          |                          |                            | j. Request a description of any other contingent and/or off-balance-sheet assets or liabilities  |
| 63.  |                          |                          |                          |                            | k. Request a list of industry or trade associations, industry or trade publications, and corporate memberships of the subject sponsor company business                           |
| 64.  |                          |                          |                          |                            | l. Request a description and current property appraisal (if available) of all nonoperating assets of the subject sponsor company business  |
| 65.  |                          |                          |                          |                            | m. Request operational (e.g., production) budgets, plans, projections, or forecasts  |
| 66.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                      | B. Conduct sponsor company management interviews, if possible  |
| 67.  |                          |                          |                          |                            | 1. Speak with senior management in all relevant functional areas, regarding:   |
| 68.  |                          |                          |                          |                            | a. Historical operations and results   |
| 69.  |                          |                          |                          |                            | b. Prospective operations and results  |
| 70.  |                          |                          |                          |                            | c. Responsibility for functional areas   |
| 71.  |                          |                          |                          |                            | 2. Discuss with senior management and/or outside legal counsel with regard to any pending or potential litigation or claims against the sponsor company, if possible, including: |
| 72.  |                          |                          |                          |                            | a. Commercial litigation   |
| 73.  |                          |                          |                          |                            | b. Employment disputes   |
| 74.  |                          |                          |                          |                            | c. Occupational and safety issues  |
| 75.  |                          |                          |                          |                            | d. Environmental issues  |
| 76.  |                          |                          |                          |                            | e. Tax audits or litigation  |
| 77.  |                          |                          |                          |                            | f. Other controversy matters   |



## Procedural Guidance for a Sponsor Company Stock Valuation and Financial Advisor Transaction Opinion Due Diligence Process (cont.)

| Item | Yes                      | No                       | NA                       | Work<br>Paper<br>Reference | Procedure  |
|------|--------------------------|--------------------------|--------------------------|----------------------------|--|
| 78.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                      | C. Conduct sponsor company physical facility visit, if possible  |
| 79.  |                          |                          |                          |                            | 1. Inspect representative plants and facilities consider:  |
| 80.  |                          |                          |                          |                            | a. Capacity adequacy of the existing plants, facilities, and equipment   |
| 81.  |                          |                          |                          |                            | b. Functional and technological adequacy of the existing facilities  |
| 82.  |                          |                          |                          |                            | 2. Discuss plants and facilities with company management representatives; consider:  |
| 83.  |                          |                          |                          |                            | a. Future plant and facility expansion and capital investment plans  |
| 84.  |                          |                          |                          |                            | b. Competitive effects of planned plant and facility changes   |
|      |                          |                          |                          |                            | III. <u>Economic environment (as of the analysis date)</u>   |
| 85.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                      | A. Consider (research and analyze) the national/international economic environment   |
| 86.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                      | B. Consider (research and analyze) the regional/local economic environment   |
| 87.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                      | C. Consider any economic relationships relevant to the performance of the sponsor company—identify significant relationships of economic performance with the performance of the sponsor company |
|      |                          |                          |                          |                            | IV. <u>Industry environment</u>  |
| 88.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                      | A. Consider (research and analyze) the industry in which the sponsor company operates  |
| 89.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                      | B. Consider (research and analyze) the nature and history of the industry in which the sponsor company operates  |
| 90.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                      | C. Consider (research and analyze) the current outlook for the industry in which the sponsor company operates  |
|      |                          |                          |                          |                            | V. <u>Fundamental position of the sponsor company</u>  |
| 91.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                      | A. Consider the sponsor company capitalization and ownership   |
| 92.  |                          |                          |                          |                            | 1. Analyze all classes of sponsor company stock, including rights, seniority, voting, etc. of each class   |
| 93.  |                          |                          |                          |                            | 2. Analyze the total outstanding shares and the distribution of ownership of each class  |
| 94.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                      | B. Consider the sponsor company history and operations   |
| 95.  |                          |                          |                          |                            | 1. Review the sponsor company history  |
| 96.  |                          |                          |                          |                            | 2. Review and analyze current business operations, including:  |
| 97.  |                          |                          |                          |                            | a. Locations and markets served  |
| 98.  |                          |                          |                          |                            | b. Products, service lines, and customer base  |
| 99.  |                          |                          |                          |                            | c. Competition, including:   |
| 100. |                          |                          |                          |                            | 1) Current and projected total market size   |
| 101. |                          |                          |                          |                            | 2) Current and projected market size growth rate   |
| 102. |                          |                          |                          |                            | 3) Position of the sponsor company within the industry   |
| 103. |                          |                          |                          |                            | 4) Relative position of the sponsor company among all existing market participants   |

## Procedural Guidance for a Sponsor Company Stock Valuation and Financial Advisor Transaction Opinion Due Diligence Process (cont.)

| Item  | Yes                      | No                       | NA                       | Work Paper Reference | Procedure   |
|---|--------------------------|--------------------------|--------------------------|----------------------|---|
| 104.  |                          |                          |                          |                      | 5) Sponsor company competitive strengths and weaknesses   |
| 105.  |                          |                          |                          |                      | 6) Sponsor company competitive opportunities and threats  |
| 106.  |                          |                          |                          |                      | d. Management personnel and assembled workforce   |
| 107.  |                          |                          |                          |                      | e. Overall positive and negative aspects of the sponsor company operations  |
| 108.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                | C. Consider the outlook for the sponsor company—review strategic plans, financial and business projections, and current business outlook  |
| VI. <u>Financial statement normalization adjustments and analysis</u> |                          |                          |                          |                      |   |
| 109.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                | A. Make appropriate financial statement normalization adjustments, including:   |
| 110.  |                          |                          |                          |                      | 1. Adjust inventory, as appropriate   |
| 111.  |                          |                          |                          |                      | a. Consider LIFO vs. FIFO inventory accounting method   |
| 112.  |                          |                          |                          |                      | b. Consider inventory write-offs and/or write-downs   |
| 113.  |                          |                          |                          |                      | 2. Adjust for excessive/insufficient management executive compensation, as appropriate  |
| 114.  |                          |                          |                          |                      | 3. Adjust for nonrecurring items, as appropriate (e.g., unusual gains/losses, nonrecurring tangible asset impairment charges, nonrecurring intangible asset impairment changes, insurance proceeds, nonrecurring revenue, and/or nonrecurring expenses, etc.) |
| 115.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                | B. Perform historical financial statement analysis  |
| 116.  |                          |                          |                          |                      | 1. Calculate and analyze common size financial statements   |
| 117.  |                          |                          |                          |                      | 2. Compute and analyze financial ratios and operating ratios, including:  |
| 118.  |                          |                          |                          |                      | a. Size   |
| 119.  |                          |                          |                          |                      | b. Growth   |
| 120.  |                          |                          |                          |                      | c. Liquidity  |
| 121.  |                          |                          |                          |                      | d. Profitability  |
| 122.  |                          |                          |                          |                      | e. Turnover/activity  |
| 123.  |                          |                          |                          |                      | f. Leverage   |
| 124.  |                          |                          |                          |                      | 3. Identify and explain any significant financial statement trends  |
| 125.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                | C. Perform prospective financial statement analysis   |
| 126.  |                          |                          |                          |                      | 1. Identify important financial variables that drive the company financial performance (e.g., capacity constraints, cost/volume/profit relationships, etc.) for prospective results of operations   |
| 127.  |                          |                          |                          |                      | 2. Obtain (if available) and analyze financial projections of prospective results of operations   |
| 128.  |                          |                          |                          |                      | 3. Assess the reasonableness of all historical management-prepared financial projections relative to historical results of operations   |
| 129.  |                          |                          |                          |                      | 4. Assess the reasonableness of all historical management-prepared financial projections relative to historical industry data   |
| 130.  |                          |                          |                          |                      | 5. Assess the reasonableness of all current management-prepared financial projections relative to current industry data   |
| 131.  |                          |                          |                          |                      | 6. Obtain and explain alternative management-prepared financial projections covering the same time period   |

**Procedural Guidance for a Sponsor Company Stock Valuation and Financial Advisor Transaction Opinion Due Diligence Process (cont.)**

| Item | Yes                      | No                       | NA                       | Work<br>Paper<br>Reference | Procedure   |
|------|--------------------------|--------------------------|--------------------------|----------------------------|---|
|      |                          |                          |                          |                            | <b>VII. <u>Business and stock valuation analysis</u></b>  |
| 132. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                      | A. Identify and select generally accepted business valuation approaches (market-based, income-based, and asset-based)   |
| 133. |                          |                          |                          |                            | 1. Explain reasons for selecting all business valuation approaches applied in the analysis  |
| 134. |                          |                          |                          |                            | 2. Explain reasons for rejecting all business valuation approaches not applied in the analysis  |
| 135. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                      | B. Perform a market approach business valuation analysis—guideline publicly traded company method (if appropriate)  |
| 136. |                          |                          |                          |                            | 1. Identify guideline publicly traded companies; consider:  |
| 137. |                          |                          |                          |                            | a. Guideline companies in the same or a similar line of business  |
| 138. |                          |                          |                          |                            | b. Size of guideline companies  |
| 139. |                          |                          |                          |                            | c. Trading activity/pricing evidence  |
| 140. |                          |                          |                          |                            | d. Financial condition of guideline companies   |
| 141. |                          |                          |                          |                            | 2. Normalize the historical financial statements of the selected guideline companies (i.e., normalize the guideline company historical financial statements to make the guideline companies more comparative to the sponsor company, that is, "apples to apples") |
| 142. |                          |                          |                          |                            | 3. Identify appropriate financial fundamentals and operating fundamentals   |
| 143. |                          |                          |                          |                            | 4. Calculate market-derived valuation pricing multiples for the selected guideline companies; consider:   |
| 144. |                          |                          |                          |                            | a. Invested capital to revenue  |
| 145. |                          |                          |                          |                            | b. Invested capital to EBITDA   |
| 146. |                          |                          |                          |                            | c. Invested capital to EBIT   |
| 147. |                          |                          |                          |                            | d. Invested capital to net operating income   |
| 148. |                          |                          |                          |                            | e. Invested capital to net income   |
| 149. |                          |                          |                          |                            | f. Invested capital to operating cash flow  |
| 150. |                          |                          |                          |                            | g. Invested capital to net cash flow  |
| 151. |                          |                          |                          |                            | 5. Analyze the range of market-derived valuation pricing multiples indicated from the guideline companies, including:   |
| 152. |                          |                          |                          |                            | a. Statistical analysis of the range of valuation pricing multiples   |
| 153. |                          |                          |                          |                            | b. Correlation with performance factors (e.g., relative size, relative growth rates, relative profit margin, relative returns on investment, etc.)  |
| 154. |                          |                          |                          |                            | 6. Compute and analyze financial ratios and operating ratios for the guideline companies, including:  |
| 155. |                          |                          |                          |                            | a. Size   |
| 156. |                          |                          |                          |                            | b. Growth   |
| 157. |                          |                          |                          |                            | c. Liquidity  |
| 158. |                          |                          |                          |                            | d. Profitability  |
| 159. |                          |                          |                          |                            | e. Turnover/activity  |
| 160. |                          |                          |                          |                            | f. Leverage   |
| 161. |                          |                          |                          |                            | 7. Compare the sponsor company to the selected guideline companies  |

## Procedural Guidance for a Sponsor Company Stock Valuation and Financial Advisor Transaction Opinion Due Diligence Process (cont.)

| Item | Yes                      | No                       | NA                       | Work<br>Paper<br>Reference | Procedure   |
|------|--------------------------|--------------------------|--------------------------|----------------------------|---|
| 162. |                          |                          |                          |                            | 8. Select the appropriate market-derived valuation pricing multiples to apply to the sponsor company; consider:   |
| 163. |                          |                          |                          |                            | a. Invested capital to revenue  |
| 164. |                          |                          |                          |                            | b. Invested capital to EBITDA   |
| 165. |                          |                          |                          |                            | c. Invested capital to EBIT   |
| 166. |                          |                          |                          |                            | d. Invested capital to net operating income   |
| 167. |                          |                          |                          |                            | e. Invested capital to net income   |
| 168. |                          |                          |                          |                            | f. Invested capital to operating cash flow  |
| 169. |                          |                          |                          |                            | g. Invested capital to net cash flow  |
| 170. |                          |                          |                          |                            | 9. Apply the selected valuation pricing multiples to the appropriate sponsor company financial fundamentals and operating fundamentals  |
| 171. |                          |                          |                          |                            | 10. Synthesize an estimate of the sponsor company invested capital (i.e., long-term interest-bearing debt plus stockholders' equity) value—subtract the market value of the sponsor company debt in invested capital valuation analysis |
| 172. |                          |                          |                          |                            | 11. Identify any appropriate company-related or security-related valuation premiums/discounts (for the specific level of business ownership interest subject to analysis)   |
| 173. |                          |                          |                          |                            | 12. Quantify any appropriate company-related or security-related valuation premiums/discounts (for the specific level of business ownership interest subject to analysis)   |
| 174. |                          |                          |                          |                            | 13. Apply any appropriate company-related or security-related valuation premiums/discounts (for the specific level of business ownership interest subject to analysis)  |
| 175. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                      | C. Perform a market approach business valuation—guideline merged and acquired company method (if appropriate)   |
| 176. |                          |                          |                          |                            | 1. Identify guideline merged or acquired companies/precedent transactions, considering:   |
| 177. |                          |                          |                          |                            | a. Same or a similar line of business of the acquired companies   |
| 178. |                          |                          |                          |                            | b. Size of the acquired companies   |
| 179. |                          |                          |                          |                            | c. Financial condition of the acquired companies  |
| 180. |                          |                          |                          |                            | d. Relevant time frame of the transactions  |
| 181. |                          |                          |                          |                            | e. Availability of information regarding the transactions   |
| 182. |                          |                          |                          |                            | 2. Normalize the historical financial statements of the selected guideline transaction companies (i.e., normalize guideline transactions to make them more comparative to the sponsor company, that is, "apples to apples")             |
| 183. |                          |                          |                          |                            | 3. Identify appropriate financial fundamentals and operating fundamentals   |
| 184. |                          |                          |                          |                            | 4. Calculate transaction pricing multiples for the guideline acquired companies; consider:  |
| 185. |                          |                          |                          |                            | a. Invested capital to revenue  |
| 186. |                          |                          |                          |                            | b. Invested capital to EBITDA   |
| 187. |                          |                          |                          |                            | c. Invested capital to EBIT   |
| 188. |                          |                          |                          |                            | d. Invested capital to net operating income   |



## Procedural Guidance for a Sponsor Company Stock Valuation and Financial Advisor Transaction Opinion Due Diligence Process (cont.)

| Item | Yes                      | No                       | NA                       | Work Paper Reference | Procedure  |
|------|--------------------------|--------------------------|--------------------------|----------------------|--|
| 189. |                          |                          |                          |                      | e. Invested capital to net income  |
| 190. |                          |                          |                          |                      | f. Invested capital to operating cash flow   |
| 191. |                          |                          |                          |                      | g. Invested capital to net cash flow   |
| 192. |                          |                          |                          |                      | 5. Analyze range of guideline transaction pricing multiples  |
| 193. |                          |                          |                          |                      | a. Statistical analysis of the range of transaction pricing multiples  |
| 194. |                          |                          |                          |                      | b. Correlation with performance factors (e.g., growth rates, profit margins, returns on investment, etc.)  |
| 195. |                          |                          |                          |                      | 6. Compute and analyze financial ratios and operating ratios for the guideline acquired companies, including:  |
| 196. |                          |                          |                          |                      | a. Size  |
| 197. |                          |                          |                          |                      | b. Growth  |
| 198. |                          |                          |                          |                      | c. Liquidity   |
| 199. |                          |                          |                          |                      | d. Profitability   |
| 200. |                          |                          |                          |                      | e. Turnover/activity   |
| 201. |                          |                          |                          |                      | f. Leverage  |
| 202. |                          |                          |                          |                      | 7. Compare the sponsor company to the guideline acquired companies   |
| 203. |                          |                          |                          |                      | 8. Select the appropriate transaction pricing multiples to apply to the sponsor company; consider:   |
| 204. |                          |                          |                          |                      | a. Invested capital to revenue   |
| 205. |                          |                          |                          |                      | b. Invested capital to EBITDA  |
| 206. |                          |                          |                          |                      | c. Invested capital to EBIT  |
| 207. |                          |                          |                          |                      | d. Invested capital to net operating income  |
| 208. |                          |                          |                          |                      | e. Invested capital to net income  |
| 209. |                          |                          |                          |                      | f. Invested capital to operating cash flow   |
| 210. |                          |                          |                          |                      | g. Invested capital to net cash flow   |
| 211. |                          |                          |                          |                      | 9. Apply the selected transaction pricing multiples to the appropriate sponsor company financial fundamentals and operating fundamentals   |
| 212. |                          |                          |                          |                      | 10. Synthesize an estimate of invested capital value—subtract the market value of the sponsor company debt in any invested capital valuation analyses                                |
| 213. |                          |                          |                          |                      | 11. Identify any appropriate company-specific or security-specific valuation premiums/discounts (for the specific level of business ownership interest subject to analysis)          |
| 214. |                          |                          |                          |                      | 12. Quantify any appropriate company-specific or security-specific valuation premiums/discounts (for the specific level of business ownership interest subject to analysis)          |
| 215. |                          |                          |                          |                      | 13. Apply any appropriate company-specific or security-specific valuation premiums/discounts (for the specific level of business ownership interest subject to analysis)             |
| 216. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                | D. Perform an income approach business valuation—discounted cash flow method (i.e., either or both a yield capitalization method and a direct capitalization method), if appropriate |

## Procedural Guidance for a Sponsor Company Stock Valuation and Financial Advisor Transaction Opinion Due Diligence Process (cont.)

| Item | Yes | No | NA | Work<br>Paper<br>Reference | Procedure   |
|------|-----|----|----|----------------------------|---|
| 217. |     |    |    |                            | 1. Review and analyze management-prepared financial projections related to sponsor company prospective results of operations for a discrete projection period   |
| 218. |     |    |    |                            | 2. Develop the appropriate income fundamentals for the analysis—for example, typically net cash flow, which considers:  |
| 219. |     |    |    |                            | a. Net income   |
| 220. |     |    |    |                            | b. Noncash expenditures (depreciation expense, amortization expense, etc.)  |
| 221. |     |    |    |                            | c. Capital expenditures   |
| 222. |     |    |    |                            | d. Working capital requirements   |
| 223. |     |    |    |                            | 3. Develop the appropriate yield capitalization rate (or present value discount rate) and direct capitalization rate, with consideration of:  |
| 224. |     |    |    |                            | a. The current capital market environment   |
| 225. |     |    |    |                            | b. The current, long-term risk-free rate of return  |
| 226. |     |    |    |                            | c. Historical equity rates of return (and/or general market equity risk premium)  |
| 227. |     |    |    |                            | d. Any size-related equity risk premium   |
| 228. |     |    |    |                            | e. Any company-specific risks/required rates of return, with consideration of:  |
| 229. |     |    |    |                            | 1) Expected attainability of the sponsor company financial projections  |
| 230. |     |    |    |                            | 2) Degree of financial/operating leverage   |
| 231. |     |    |    |                            | 3) Degree of diversification of the sponsor company business base   |
| 232. |     |    |    |                            | 4) Capital structure of the sponsor company   |
| 233. |     |    |    |                            | 5) Typical capital structure in the sponsor company industry  |
| 234. |     |    |    |                            | f. Expected long-term growth rate in the income metric subject to capitalization (typically net cash flow); consider that the direct capitalization rate is typically quantified as: the yield capitalization rate minus the expected long-term growth rate |
| 235. |     |    |    |                            | 4. Develop an estimate of the sponsor company terminal/residual value, with consideration of:   |
| 236. |     |    |    |                            | a. Terminal/residual year financial fundamentals (e.g., net cash flow terminal period projection)   |
| 237. |     |    |    |                            | b. Terminal/residual year direct capitalization rate (e.g., often derived from the Gordon growth model or a similar model)  |
| 238. |     |    |    |                            | 5. Apply the derived present value discount rate to the estimated income projection (e.g., net cash flow), including:   |
| 239. |     |    |    |                            | a. The discrete projection period of periodic income  |
| 240. |     |    |    |                            | b. The terminal/residual period income estimate   |
| 241. |     |    |    |                            | 6. Calculate an estimate of the sponsor company invested capital (long-term, interest-bearing debt plus total equity) value—subtract the market value of the sponsor company long-term debt in invested capital valuation analyses                          |

**Procedural Guidance for a Sponsor Company Stock Valuation and  
Financial Advisor Transaction Opinion Due Diligence Process (cont.)**

| Item | Yes                      | No                       | NA                       | Work<br>Paper<br>Reference | Procedure   |
|------|--------------------------|--------------------------|--------------------------|----------------------------|---|
| 242. |                          |                          |                          |                            | 7. Identify any appropriate company-specific or security-specific valuation premiums/discounts (for the specific level of business ownership interest subject to analysis)  |
| 243. |                          |                          |                          |                            | 8. Quantify any appropriate company-specific or security-specific valuation premiums/discounts (for the specific level of business interest subject to analysis)  |
| 244. |                          |                          |                          |                            | 9. Apply any appropriate company-specific or security-specific valuation premiums/discounts (for the specific level of business interest subject to analysis)   |
| 245. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                      | E. Perform an asset-based approach business valuation—either (or both) adjusted net asset method or asset accumulation method (if appropriate)  |
| 246. |                          |                          |                          |                            | 1. Adjust all on-balance-sheet recorded assets to a current value consistent with the business valuation assignment standard of value (e.g., current assets, real estate, tangible personal property, recorded intangible assets, and other assets); consider all generally accepted income approach, market approach, and cost approach property valuation methods |
| 247. |                          |                          |                          |                            | 2. Identify all off-balance-sheet identifiable intangible assets  |
| 248. |                          |                          |                          |                            | 3. Estimate the current value of all off-balance-sheet identifiable intangible assets; consider the multiperiod excess earnings method ("MEEM") analysis for at least one identifiable intangible asset   |
| 249. |                          |                          |                          |                            | 4. Estimate the current value of any intangible value in the nature of goodwill; consider a capitalized excess earnings method ("CEEM") analysis  |
| 250. |                          |                          |                          |                            | 5. Adjust all recorded liabilities to a current value consistent with the business valuation assignment standard of value   |
| 251. |                          |                          |                          |                            | 6. Adjust all off-balance-sheet and contingent liabilities to a current value consistent with the business valuation standard of value; consider any liabilities that will be created as a result of the asset revaluation process  |
| 252. |                          |                          |                          |                            | 7. Calculate an estimate of the sponsor company total equity value (as the total analysis date value of all tangible and all intangible assets less the total analysis date value of all recorded and all contingent liabilities)   |
| 253. |                          |                          |                          |                            | 8. Identify any appropriate company-specific and security-specific valuation premiums/discounts (for the specific level of business ownership interest subject to analysis)   |
| 254. |                          |                          |                          |                            | 9. Quantify any appropriate company-specific and security-specific valuation premiums/discounts (for the specific level of business ownership interest subject to analysis)   |
| 255. |                          |                          |                          |                            | 10. Apply any appropriate company-specific and security-specific valuation premiums/discounts (for the specific level of business ownership interest subject to analysis)   |
| 256. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                      | F. Consider any other generally accepted business or security valuation approaches  |
| 257. |                          |                          |                          |                            | 1. Consider the application of any generally accepted business or security valuation approaches   |

**Procedural Guidance for a Sponsor Company Stock Valuation and Financial Advisor Transaction Opinion Due Diligence Process (cont.)**

| Item  | Yes                      | No                       | NA                       | Work Paper Reference | Procedure   |
|---|--------------------------|--------------------------|--------------------------|----------------------|---|
| 258.  |                          |                          |                          |                      | 2. Perform all appropriate generally accepted business or security valuation approaches and methods or document the reasons why such other business valuation approaches and methods were not applicable  |
| 259.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                | G. Prepare a sponsor company business valuation synthesis and conclusion  |
| 260.  |                          |                          |                          |                      | 1. Determine the relevance of the respective generally accepted business valuation approaches used in the analysis  |
| 261.  |                          |                          |                          |                      | 2. Weight the alternative estimates of value  |
| 262.  |                          |                          |                          |                      | 3. Identify the appropriate valuation premiums/discounts (for the specific sponsor company securities subject to analysis)  |
| 263.  |                          |                          |                          |                      | 4. Quantify the appropriate valuation premiums/discounts (for the specific sponsor company securities subject to analysis)  |
| 264.  |                          |                          |                          |                      | 5. Apply the appropriate valuation premiums/discounts (for the specific sponsor company securities subject to analysis)   |
| 265.  |                          |                          |                          |                      | 6. Synthesize an estimate of value for the analysis subject   |
| 266.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                | H. Reach a conclusion of value—conclude the appropriate standard of value estimate for the analysis subject   |
| VIII. <u>Documenting and reporting the results of the fairness opinion financial advisory due diligence</u> |                          |                          |                          |                      |   |
| 267.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                | A. Prepare engagement work papers—prepare and maintain work papers and files that document the fairness opinion financial advisory due diligence procedures   |
| 268.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                | B. Prepare the transaction fairness opinion, as requested   |
| 269.  |                          |                          |                          |                      | 1. Describe the proposed sponsor company securities purchase or sale transaction  |
| 270.  |                          |                          |                          |                      | 2. Analyze the proposed sponsor company securities purchase or sale transaction in order to conclude whether: (a) the ESOP is paying no more to buy the sponsor company stock than any other typical willing buyer would pay or (b) the ESOP is receiving no less to sell the sponsor company stock than any other typical willing seller would receive |
| 271.  |                          |                          |                          |                      | 3. Opine on the fairness of the essential components of the proposed sponsor company securities purchase or sale transaction from a financial point of view, with consideration of the concluded fair market value for the sponsor company stock  |
| IX. <u>Documenting and reporting the results of the sponsor company valuation analysis</u>                  |                          |                          |                          |                      |   |
| 272.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                | A. Prepare engagement work papers—prepare and maintain work papers and files that document the sponsor company valuation analysis   |
| 273.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                | B. Prepare the value opinion and valuation report   |
| 274.  |                          |                          |                          |                      | 1. Opine on the adequate consideration with regard to the subject transaction; if requested   |
| 275.  |                          |                          |                          |                      | 2. Opine on the fair market value (or other appropriate standard of value) of the analysis subject  |
| 276.  |                          |                          |                          |                      | 3. Prepare a valuation report containing the following information:   |
| 277.  |                          |                          |                          |                      | a. A summary of the professional qualifications of the analyst preparing the valuation  |



**Procedural Guidance for a Sponsor Company Stock Valuation and  
Financial Advisor Transaction Opinion Due Diligence Process (cont.)**

| Item | Yes                      | No                       | NA                       | Work<br>Paper<br>Reference | Procedure   |
|------|--------------------------|--------------------------|--------------------------|----------------------------|---|
| 278. |                          |                          |                          |                            | b. A statement of the sponsor company stock value, a statement of the generally accepted valuation approaches and methods used to estimate that sponsor company value, and the reasons for the selection and rejection for valuation approaches |
| 279. |                          |                          |                          |                            | c. A full description of the sponsor company security being valued  |
| 280. |                          |                          |                          |                            | d. The factors taken into account in developing the valuation, including any restrictions, understandings, agreements or obligations limiting the use or disposition of the sponsor company security  |
| 281. |                          |                          |                          |                            | e. The purpose and objective for which the valuation was developed  |
| 282. |                          |                          |                          |                            | f. The relevance or significance accorded to the generally accepted business valuation approaches applied—and the generally accepted business valuation approaches and methods considered but not applied                                       |
| 283. |                          |                          |                          |                            | g. The effective date of the valuation  |
| 284. |                          |                          |                          |                            | h. In the case where a written valuation report is prepared, the signature of the analyst developing the valuation and the date that the valuation report was signed  |
| 285. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____                      | C. Prepare a transactional fairness opinion   |
| 286. |                          |                          |                          |                            | 1. Opine on the fairness of the proposed sponsor company stock purchase or sale transaction from a financial perspective  |
| 287. |                          |                          |                          |                            | 2. Provide a complete description of the terms of the proposed sponsor company stock purchase or sale transaction   |
| 288. |                          |                          |                          |                            | 3. Provide a complete description of the financial advisory due diligence procedures performed in the analysis  |
| 289. |                          |                          |                          |                            | 4. In the case where a transactional fairness opinion is prepared, provide the signature of the financial advisory firm and the date that the transaction fairness opinion was signed   |

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111 S.W. Fifth Avenue  
Suite 2150  
Portland, OR 97204  
503 • 222 • 0577  
503 • 222 • 7392 (fax)

8600 W. Bryn Mawr Avenue  
Suite 950-N  
Chicago, IL 60631  
773 • 399 • 4300  
773 • 399 • 4310 (fax)

1355 Peachtree Street, NE  
Suite 1470  
Atlanta, GA 30309  
404 • 475 • 2300  
404 • 475 • 2310 (fax)

# The Independent Financial Adviser and ESOP Feasibility, Formation, and Transactional Fairness Opinion Analyses

*Valuation analysts and independent financial advisers are often asked to opine on stock purchase or sale transactions (potential or pending) involving an employee stock ownership plan (“ESOP”) and an ESOP sponsor company. This discussion focuses on the role of the independent financial adviser in (1) identifying successful sponsor company candidates for a potential ESOP formation, (2) performing an ESOP formation financial feasibility analysis, and (3) preparing an ESOP sponsor company stock purchase (or sale) transaction fairness opinion. This discussion is primarily presented from the perspective of the financial adviser to the ESOP trustee. This discussion is intended to provide guidance (1) to closely held company owners who are considering an ESOP formation and a stock sale transaction and (2) to legal, accounting, trustee, and other ESOP professionals who may be evaluating an ESOP sponsor company stock purchase or sale transaction.*

*The original version of this discussion was published in the Autumn 2005 issue of Insights under the title “The Role of the Independent Financial Adviser in the ESOP Feasibility, Formation, and Transaction Fairness Process.” Malcolm B. Hartman was the author of the original discussion.*

## INTRODUCTION

This discussion provides guidance for closely held company owners who are considering:

1. an employee stock ownership plan (“ESOP”) formation and/or
2. an ESOP leveraged purchase of the sponsor company stock.

This discussion also provides guidance for sponsor company bankers, leveraged ESOP financing institutions, sponsor company accountants, sponsor company legal counsel, ESOP legal counsel, and ESOP trustees.

This discussion focuses on how an ESOP formation/sponsor company ownership transition transaction can provide a mechanism to:

1. achieve the wealth enhancement, investment diversification, and asset monetization objectives of the closely held company owners and
2. provide a controlled ownership transition process to a friendly corporate acquirer (i.e., the sponsor company employees) through a tax-advantaged sale transaction.

Independent financial advisers (“financial advisers”) who provide professional services related to the design and implementation of a ESOP sponsor company leveraged stock purchase frequently receive calls from closely held company owners. These closely held company owners may own companies of all sizes and in all industries.

Many private company owners may have some limited information regarding the economic benefits

associated with of an ESOP formation and a sponsor company stock acquisition. However, the private company owners typically do not have sufficient information to make an informed decision regarding how an ESOP leveraged stock acquisition transaction would work in their closely held company.

Unless indicated otherwise, this discussion is presented from the perspective of the financial adviser to the ESOP trustee (and not from the perspective of the financial adviser to the sponsor company or to the selling shareholders).

This discussion summarizes the attributes that independent financial advisers consider in a closely held company that may make it a “good” candidate for an ESOP formation/leveraged stock purchase transaction. This discussion is based on the typical role played in ESOP sponsor company stock purchase (or sale) transactions by:

1. the financial adviser to the ESOP trustee (i.e., the sponsor company buyer) and
2. the financial adviser to the closely held company owners (i.e., the sponsor company sellers).

As with any general discussion of a complicated issue, there will be exceptions to the ESOP formation sponsor company candidate criteria discussed herein.

This discussion also summarizes (1) the ESOP formation process and (2) the typical ESOP formation financial feasibility analysis process.

Finally, this discussion summarizes the typical role of the financial adviser in the analysis of a pending sponsor company stock purchase/sale transaction. Specifically, this discussion focuses on the purpose and the objective of the financial adviser’s fairness analysis and fairness opinion in the assessment of a pending ESOP purchase (or sale) of sponsor company stock.

## ESOP FORMATION SPONSOR COMPANY CANDIDATE CRITERIA

The following discussion summarizes some of the criteria that financial advisers consider in the assessment of whether a particular closely held company may be a potential candidate (1) for an ESOP implementation and (2) for an ESOP purchase of the private company stock.

### #1: Closely Held Company Owner Need for Wealth Diversification

The principal shareholders of the closely held company often have a need to diversify their personal

wealth and investment portfolios. Typically, these individuals have spent most of their careers building and managing the subject closely held company.

However, perhaps due to their dedication to the closely held company, these otherwise successful individuals typically have not diversified their personal wealth. Often, virtually all of the personal wealth of these business owners is tied up in an illiquid ownership interest in the subject closely held company.

### #2: Closely Held Company Owner Desire for Personal Retirement and Ownership Succession Planning

The subject closely held company shareholders may want to begin the ownership succession planning process or may be nearing retirement age. Such shareholders may be considering what ownership transition alternatives are available to them.

For shareholders who are interested in maintaining some continuity in the management and ownership of the closely held company, an ESOP leveraged stock purchase transaction may provide a viable alternative to the sale of the subject company to a corporate acquirer.

Many closely held company owners do not begin the ownership succession planning process as early as they should. An ESOP leveraged stock acquisition transaction can be an effective mechanism for transitioning the closely held company to the next generation of management and ownership. However, it is important to begin the ESOP formation planning process as early as possible—so that the sponsor company ownership transition can be orderly and efficient.

There are numerous examples of closely held company shareholders who sold their shares to a newly formed ESOP—and then departed soon after the company sale. However, without sufficient time to adequately train and prepare the successor company management team, an ESOP leveraged stock purchase transaction may be a risky form of ownership transition.

### #3: Closely Held Company Business Cycle Considerations

The best candidate for an ESOP leveraged stock acquisition transaction will be a closely held company:

1. that has been in business for a number of years and
2. that has demonstrated an established position in its marketplace.

In addition, the successful candidate for an ESOP leveraged stock acquisition transaction will be a closely held company that:

1. is currently profitable and
2. is experiencing historical and expected long-term growth.

The more reliable the subject company's expected future results of operations, the less risk there is to the ESOP investment in the sponsor company stock.

In contrast, an ESOP leveraged stock acquisition transaction in an immature sponsor company can be problematic. The sale of a development stage company's stock to an ESOP may occur at a lower transaction price than the sale of a similarly sized mature company that has developed its markets, products, and services.

In the ownership transition planning process, financial advisers considering an ESOP leveraged stock acquisition transaction should carefully analyze the growth prospects for the subject company. If the value of the potential sponsor company may significantly increase in the future, it may be in the best interests of the private company owners to:

1. sell only a small percentage of the subject company stock to the ESOP and
2. defer the sale of the remainder of the subject company stock to a later date.

Alternatively, if the subject company results of operations are expected to continue on an established growth curve, then it may be appropriate to sell the entire company to an ESOP—at its current fair market value. In this scenario, the selling stockholders will not miss out on any future increases in the subject company value.

## #4: The Subject Company Size Considerations

ESOP leveraged stock acquisitions are more common in larger closely held companies than in smaller closely held companies. For the small closely held company, an ESOP leveraged stock acquisition transaction may not be practical. This consideration is due to the fact that there is a relatively fixed level of administration costs related to the initial formation—and the ongoing maintenance—of a leveraged ESOP.

In other words, the expense associated with an ESOP formation does not vary directly with either the size of the sponsor company or the value of the sponsor company stock purchase. This statement is



generally true regardless of the size of the subject closely held company.

These transaction-related costs may represent a small percentage of the company sale price for a larger company (e.g., a company with an equity value over, say, \$50 million). However, these transaction-related costs may represent a large percentage of the company sale price for a small company (e.g., a company with an equity value below, say, \$10 million).

The following discussion presents three so-called “rules of thumb” regarding the minimum practical size for an ESOP formation/leveraged employer stock purchase transaction.

## The Subject Company Number of Employees

There is no legal limit regarding how many employees a closely held company must have in order to sponsor an ESOP leveraged stock acquisition. However, companies with fewer than 25 to 50 employees may find that the costs of implementing a leveraged ESOP stock purchase transaction may make such an ownership transition economically unattractive.

There is also the issue of the amount of the ESOP participant/employee annual payroll required to support the required annual contributions to the ESOP plan. This issue is important because the Employee Retirement Income Security Act of 1974 (“ERISA”) limits the amount of the annual contribution that the employer corporation can make to the ESOP—and that limit is based on a percentage of the employer corporation total annual payroll.

The National Center for Employee Ownership (“NCEO”) suggests that 25 may effectively be the minimum number of employees required to



economically sponsor a leveraged ESOP stock purchase transaction.

Experienced financial advisers often suggest that 30 to 50 employees may be a more realistic “rule of thumb” regarding the minimum number of employees required to economically accomplish an ESOP leveraged stock purchase transaction.

## The Subject Company Annual Revenue

Of course, the guideline level for the profitability of closely held companies varies greatly, even within the same industry. For this reason, using annual revenue as a guideline of company suitability for an ESOP formation is not always the most helpful rule of thumb. However, a leveraged ESOP formation is rare in a sponsor company with less than \$10 million to \$25 million in annual revenue.

## The Subject Company Profitability and Estimated Equity Value

In many cases, the value of the sponsor company equity can be generally estimated based on:

1. the application of a market-derived pricing multiple multiplied by
2. the sponsor company’s historical and/or prospective income.

For such sponsor company preliminary valuation purposes, subject company income is often measured as either EBIT (i.e., earnings before interest and taxes) or EBITDA (earnings before interest, taxes, depreciation, and amortization).

For example, let’s assume that the subject closely held company generates normalized ex post EBITDA of \$2,000,000. And, let’s assume that the appropriate market-derived EBITDA pricing multiples are in the range of 8x to 10x. Based on that EBITDA level and those EBITDA pricing multiples, the total enterprise value indication may be in the range of \$16 million to \$20 million (before subtracting interest-bearing long-term debt). Subtracting the subject company’s outstanding interest-bearing long-term debt would indicate the total equity value for the subject sponsor company.

That equity value would be based on a marketable, controlling ownership interest level of value basis.

A very general “rule of thumb” is that the equity value of a sponsor company should be at least \$10 million in order for an ESOP leveraged stock purchase transaction to be economically viable.

## #5: A Strategic Buyer Purchase Price Is Not a Requirement of the Selling Stockholders

As a general rule, the stock purchase transaction is more likely to go well when the closely held company shareholders recognize the need to be reasonable when obtaining liquidity through a leveraged stock sale to an ESOP. In contrast, an ESOP leveraged stock purchase transaction is more likely to be unsuccessful when the closely held company stockholders demand to receive the highest maximum price for their stock.

Part of the leveraged ESOP planning process is the preparation of a post-transaction sponsor company expected cash flow analysis. The ESOP trustee and its financial adviser should carefully analyze the expected future financial condition of the subject company in the years after the sale. In this analysis of sponsor company future results of operations, the financial adviser will typically consider both (1) the most-likely and (2) the worst-case financial projection scenarios.

The objective of this expected future (post-ESOP implementation) sponsor company cash flow analysis is to ensure that the subject company:

1. will be reasonably able to amortize the ESOP leveraged stock acquisition debt and
2. will be reasonably able to react to unexpected business opportunities or contingencies as they may arise in the future.

## #6: Quality of Successor Management

A closely held company candidate to sponsor an ESOP leveraged stock purchase should have a senior management team that:

1. has been in place for several years and
2. is actively involved in the ESOP formation process.

Such a sponsor company management team will mitigate the ownership transition problems that may follow the sale of the principal shareholder’s stock to the ESOP.

In a recent ESOP stock acquisition transaction, the sponsor company senior management team included several executives: the president, CFO, purchasing manager, director of manufacturing, and the company facility managers.

From the inception of the leveraged ESOP transaction planning, these sponsor company executives were all actively involved in the planning process. After the ownership transition transaction

was completed, this management team was there to ensure that the now ESOP-owned sponsor company would continue to be successful.

In contrast, the sudden departure of a key shareholder/employee can have a disruptive effect on the sponsor company. Let's consider the example of a closely held company founder who developed most of the company's business relationships over the years. If that company founder suddenly decided to retire right after selling the sponsor company stock to the newly created ESOP, then those business prospects could be imperiled.

Accordingly, financial advisers to an ESOP are particularly sensitive to key-person-dependent sponsor company sale transactions. This is because the ESOP investment in a "key-person-dependent" sponsor company carries with it higher risk—and correspondingly greater required returns.

As a part of the sponsor company stock valuation process, the financial adviser may spend a significant amount of time talking to—and assessing the competency of—the sponsor company management team.

## #7: Consideration of Sponsor Company Contingent Liabilities

The sponsor company contingent liabilities are often discussed at the initial ESOP formation planning meeting. Financial advisers are sometimes involved early when the subject closely held company is, in almost all respects, a good candidate for an ESOP formation and leveraged stock purchase transaction.

However, suppose the financial adviser has performed the due diligence investigation with regard to the potential sponsor company and uncovers significant contingent liabilities. These contingent liabilities invariably may be a significant barrier to the ESOP formation and leveraged stock purchase transaction.

In one situation, the management (who were potential buyers) of a closely held manufacturer of specialty chemical products, asked the ESOP trustee and its financial adviser to analyze the financial feasibility of a leveraged ESOP stock purchase transaction. The closely held company management had some idea of what the fair market value of the company was. Therefore, the closely held company owners had some idea of what price a sale of the company to an ESOP would yield to the subject company shareholders.

In fact, the financial adviser's estimated fair market value of the company was within the range of what company management thought it should be. After additional due diligence analysis, however, the

ESOP trustee's financial adviser discovered that the subject manufacturer had a serious ground water contamination problem.

This contingent liability (i.e., the environmental cleanup costs) turned out to be a deal breaker. In this case, there could be no sale of the closely held company stock to an ESOP without a full indemnification for the environmental liability from the selling shareholders to the ESOP trust.

It is often better for all parties to delay the implementation of the ESOP until such contingent liability issues are resolved. This is because the ESOP trustee will be understandably concerned over an investment in a sponsor company with such unresolved liability issues.

## #8: Management Openness to the Benefits of Broad-Based Sponsor Company Ownership

Successful ESOP formation candidates tend to be sponsor companies where the senior management fully supports the concept of broad-based employee ownership. In sponsor companies where ESOP support only resides at the lower employee levels, effective communication of the ESOP benefits throughout the organization becomes difficult.

In such instances, the formation of the ESOP will not have the expected positive impact on the sponsor company prospective results of operations.

## #9: Available Collateral for the Sponsor Stock Acquisition Loan

The amount of (and the quality of) the sponsor company stock acquisition loan collateral is an important issue in any ESOP leveraged stock purchase transaction. This consideration is particularly important with regard to the ESOP acquisition of the stock of professional services firms. Unlike industrial and commercial companies, professional services firms often have relatively small amounts of tangible assets to pledge as collateral for the sponsor company stock acquisition loan.

The loan underwriting criteria with respect to ESOP sponsor company stock acquisition loans are pretty much the same as for any other kind of commercial lending. The ESOP financial institution lender is looking for a security interest in the form of loan collateral. And, the ESOP financial institution lender will often look to the sponsor company for unencumbered tangible assets to pledge as such debt collateral.

The issue of the ESOP stock acquisition loan collateral should be an early planning issue for both:

1. the sponsor company and
2. the financial adviser to the ESOP.

In the event that there is insufficient loan collateral, the sponsor company selling shareholders may have to support the ESOP stock acquisition loan with a pledge of the sale transaction proceeds. In circumstances where the sponsor company selling shareholders pledge the transaction sale proceeds as loan collateral, the selling shareholders effectively continue to be at risk for the performance of the sponsor company.

## THE ESOP FORMATION FINANCIAL FEASIBILITY STUDY

Most ESOP leveraged stock acquisition transactions begin as the proposed solution to a company owner's specific problem or objective. The owner's objective may be: how can that company owner achieve liquidity from an investment in a substantial closely held company? The successful implementation of an ESOP leveraged stock acquisition involves significant planning.

An ESOP formation financial feasibility study is one important component of this planning. Such ESOP formation feasibility studies are typically performed by financial advisers to the owners of the sponsor company with significant experience and expertise in both:

1. closely held sponsor company ESOP formations and
2. ESOP leveraged stock purchase transactions.

The ESOP formation financial feasibility study may not necessarily result in a narrative written report. However, if the financial adviser follows a rigorous ESOP financial feasibility analysis process, there will be fewer problems throughout the life of the plan.

## THE ESOP FORMATION FINANCIAL FEASIBILITY PROCESS

The ESOP formation planning and financial feasibility process should be thorough and unhurried. The best practical first procedure for the closely held company and the selling shareholders is to obtain enough information to permit them to become familiar with the basics of an ESOP formation.

In addition to information available from ESOP practitioners, a wealth of ESOP-related information

is readily available on the Internet. Sites such as [www.nceo.org](http://www.nceo.org) and [www.esopassociation.org](http://www.esopassociation.org) contain journal articles, position papers, and brochures regarding many aspects of ESOP implementations. Further, there are a number of informative ESOP-related seminars offered around the country each year.

Once the subject company selling shareholders have a basic understanding of what an ESOP is and how an ESOP works, an initial meeting with their financial adviser is appropriate. Such an initial meeting could include:

1. the financial adviser to the ESOP and
2. the ERISA counsel to the ESOP.

This meeting may also include (1) the closely held company's accountants and legal counsel and (2) the financial adviser to the selling shareholders.

One conclusion of this initial meeting should be a determination of whether a financial adviser should be retained by the selling shareholders to analyze the financial feasibility of an ESOP formation. The result of such an ESOP financial feasibility study should provide enough information for the selling shareholders to make a decision as to whether or not the subject company should proceed with the formation of an ESOP.

One often overlooked recommendation in the ESOP financial feasibility process is for the financial adviser to encourage the selling shareholders to talk to peers at other closely held companies that have implemented an ESOP. The selling shareholders should find out what has worked and what hasn't worked at those other sponsor companies.

Accordingly, the selling shareholders may be able to avoid some of the more obvious pitfalls as the ESOP formation process moves forward. Most financial advisers agree that ESOP sponsor company managers are often willing to share their thoughts and ideas.

The results of the ESOP financial feasibility analysis are then presented (1) to the selling shareholders and (2) to their financial advisers and legal counsel. Based on this ESOP financial feasibility study, a decision can be made as to whether or not to proceed with the ESOP formation and implementation.

Recognizing that there is an emphasis on confidentiality during the ESOP planning process, it is a best practice for the selling shareholders to obtain input from as many financial advisers and other professionals as is practical.

## CONTENT OF A TYPICAL ESOP FORMATION FINANCIAL FEASIBILITY ANALYSIS

The financial adviser to the selling shareholders will focus on several basic procedures in conducting the ESOP financial feasibility study. These ESOP formation financial feasibility analysis procedures typically include the following:

- Determine a preliminary range of values that the ESOP may be able to pay for the sponsor company stock. This preliminary range of values is typically based on a limited financial analysis, and it is not a formal valuation opinion based on a rigorous business valuation analysis.

Nonetheless, the financial adviser will apply generally accepted valuation approaches and methods (such as a discounted cash flow analysis and a guideline publicly traded company analysis) to arrive at the preliminary range of subject company stock values.

- Investigate any barriers to a successful ESOP sponsor company stock purchase transaction (e.g., environmental, legal, corporate form, successor management, contribution deductibility issues, etc.). If conditions exist that would make the sponsor company stock sale impossible, the analysis should stop until a solution is found. Any number of potential stock purchase/sale barriers may be investigated in this phase of the feasibility analysis.

Common sponsor company stock purchase/sale barriers include the following:

1. The selling shareholders have an unrealistic expectation of the company stock value.
2. The closely held company is too small in terms of too few employees or too low of a payroll amount.
3. The successor management is inadequate.
4. The closely held company historical or expected growth rate has declined.
5. The closely held company income has been historically erratic.
6. The closely held company management has been previously unsuccessful in finding a corporate acquirer.
7. There are no unencumbered sponsor company assets with which to collateralize the ESOP stock acquisition loan.

- Assess the impact of the proposed transaction on the sponsor company after the transaction is completed (both short-term and long-term). If the company's assumption of the ESOP stock acquisition debt will change in any significant manner the way the sponsor company is operated, it is best to know this and to address this issue up front.

An example of such a change would be the need to defer future capital expenditures in order for the sponsor company cash flow to service the ESOP stock acquisition loan.

- Assess the ability of the ESOP (through the sponsor company) to finance the stock purchase transaction based on reasonable credit terms. This analysis can be performed by the sponsor company management or by the selling shareholders.

The objective of such a debt capacity analysis is to determine what kind of terms may be available for the required stock acquisition financing, including collateral, guarantees, and the use of the sale proceeds.

Generally, two or more financial institutions would be asked (1) to provide financing terms input as to the particular proposed transaction and (2) to suggest alternative structures that may seem appropriate from the lender's viewpoint.

- Establish a proposed basic transaction structure. Of course, this proposed deal structure will be subject to changes as the ESOP formation planning moves forward.

Several basic issues—such as whether an ownership control transaction will work, whether any seller financing should be considered, and whether a recapitalization may be necessary to get the deal completed—should be addressed in the proposed structure.

Many ESOP stock acquisition transactions change form as negotiations between the sellers and the ESOP trustee move forward. Nonetheless, without a basic structural framework, the ESOP formation feasibility study doesn't mean much.

- Assess the impact on income requirements, estate tax liability, and retirement planning for the selling shareholders. Often, this component of the financial feasibility analysis is performed in conjunction with the seller's financial adviser and accountant/tax adviser.



The formation of an ESOP often presents unique estate planning opportunities for the closely held company selling shareholders.

## WHO IS THE FINANCIAL ADVISER'S CLIENT?

A discussion regarding who is working for whom in the ESOP formation financial feasibility process may be appropriate. In a company stock share transaction, the subject company is likely to retain its own independent financial adviser to complete its work for the benefit of the selling shareholders and/or the closely held company board of directors.

In such instances, an ESOP trustee may be retained later in the process, and the ESOP trustee then retains both a financial adviser and legal counsel. In such an instance, the ESOP trustee's financial adviser will make an independent assessment of the proposed ESOP stock purchase transaction as it is presented to the ESOP trustee. In other words, the financial adviser to the ESOP trustee may not become directly involved in the transaction planning process.

The ESOP financial adviser's work results in a transaction opinion solely for the ESOP trustee. The financial adviser to the ESOP trustee does not provide a transaction opinion for the sponsor company or for the company selling shareholders.

For smaller, middle-market companies, the financial adviser for the ESOP may conduct a feasibility analysis for the ESOP trustee.

In these cases, the financial adviser to the ESOP will address the adviser's work product to the ESOP trustee. This work product will contain all of the necessary ESOP financial feasibility analysis information.

The role of the ESOP financial adviser is solely to provide the analysis and financial opinions to the ESOP trustee at the closing of the ESOP stock purchase transaction.

## EXPENSES AND TIMING OF THE ESOP FORMATION FINANCIAL FEASIBILITY STUDY

The expense of the ESOP formation feasibility study will vary depending on the facts and circumstances of the subject company and of the subject transaction. The financial adviser to the ESOP may charge a fixed fee for his or her work. Or, the financial

adviser to the ESOP may propose an hourly fee structure.

ESOP financial feasibility analyses performed for smaller companies (resulting in informal reports) tend to cost less than formal presentations. However, the engagement with the financial adviser is often structured so that if a barrier to a successful ESOP formation is found, then the adviser stops working immediately.

The ESOP financial feasibility analysis is one important component of the ESOP valuation process. In some cases, the ESOP financial feasibility analysis is a practical requirement for the ultimate success of the ESOP implementation. Therefore, the cost of such an ESOP financial feasibility study should be considered in the context of the overall ownership transition transaction. The ESOP financial feasibility analysis is simply the an early phase in the sponsor company valuation process.

An ESOP financial feasibility analysis can take only a few days of analytical time, or it can be a thorough planning process taking several weeks or months. Since the ESOP formation process is intended to provide a solution to the selling shareholders' problem or objective, a thorough ESOP formation financial feasibility study may be the best investment the selling shareholders can make.

## ESOP SPONSOR COMPANY STOCK PURCHASE (OR SALE) TRANSACTION FAIRNESS OPINIONS

In the potential ESOP purchase of the sponsor company stock, the ESOP trustee has an obligation to consider the subject investment opportunity in comparison to other available investments. Other available investments are those investments that are considered reasonable alternatives to the proposed sponsor company stock purchase/sale transaction.

If appropriate due diligence investigation procedures are not followed, then the ESOP trustee may be responsible for approving an unsound investment transaction. Therefore, a written fairness opinion from an independent financial adviser is an integral component of most ESOP sponsor company stock acquisition transactions.

One objective of a transaction fairness opinion issued by the financial adviser is to ensure that the



ESOP sponsor company stock purchase transaction can withstand the scrutiny of:

1. the U.S. Department of Labor,
2. the Internal Revenue Service, and
3. the subject ESOP beneficiaries.

Typically in an ESOP sponsor company stock purchase transaction, the financial adviser is retained by the ESOP trustee. The ESOP trustee is responsible for representing the ESOP interests related to the proposed sponsor company stock purchase transaction. As part of the due diligence procedures related to the proposed stock purchase transaction, the financial adviser to the ESOP is asked to provide a written opinion, known as a fairness opinion.

The fairness opinion will analyze whether the proposed sponsor company stock purchase transaction is fair to the ESOP.

## OVERVIEW OF AN ESOP SPONSOR COMPANY STOCK ACQUISITION FAIRNESS OPINION

A fairness opinion is a letter prepared by the financial adviser to the ESOP that states whether or not the proposed sponsor company stock purchase transaction is fair to the ESOP. Fairness is assessed:

1. from a financial point of view,
2. as of a specific date, and
3. based on certain assumptions, limitations, and procedures.

An ESOP stock purchase transaction fairness opinion has two purposes:

1. To provide the ESOP trustee with essential information regarding the pending sponsor company stock purchase transaction
2. To provide documentation that the ESOP trustee applied reasonable business judgment in making the sponsor company stock purchase investment decision on behalf of the ESOP

Although fairness opinions are not legally required in an ESOP sponsor company stock purchase transaction, it is prudent for the ESOP trustee to obtain such an opinion. In the event of a dispute or litigation over the sponsor company stock purchase transaction, the fairness opinion may help support a regulatory or judicial finding that the ESOP trustee made an informed business judgment.

It is noteworthy that a fairness opinion does not recommend an ESOP sponsor company stock purchase transaction. Nor does a fairness opinion provide a legal opinion on the ESOP sponsor company stock purchase transaction.

It is the responsibility of the ESOP trustee to determine whether the pending stock purchase (or sale) transaction is appropriate. The financial adviser's role is to provide an opinion of the pending stock purchase (or sale) transaction "from a financial point of view."

In order to clarify the meaning of "from a financial point of view," ESOP participants should understand what a nonfinancial point of view is. In any sponsor company stock purchase (or sale) transaction, an ESOP participant may ask such questions as:

1. Is now a good time to buy—or to sell—the sponsor company stock?
2. I bought the sponsor company stock for a higher price than the pending transaction price. How can this pending transaction price be fair to me?

These questions may be valid concerns for many ESOP participants. However, these queries involve different questions of transactional fairness that do not necessarily have anything to do with the pending transaction's financial fairness.

## WHEN TO OBTAIN AN ESOP TRANSACTION FAIRNESS OPINION

Fairness opinions follow a complex analysis under a strict deadline. Therefore, the financial adviser to the ESOP will expect to receive a substantial professional fee for this transaction opinion service. Accordingly, the ESOP trustee needs to weigh the known cost against the expected benefit when obtaining a fairness opinion related to a pending ESOP sponsor company stock purchase (or sale) transaction.

Typically, the size and complexity of the sponsor company stock purchase (or sale) transaction is the primary factor that determines whether an ESOP transaction fairness opinion is needed.

The following list indicates some of the situations in which an ESOP purchase (or sale) of sponsor company stock may be subject to a regulatory or judicial challenge.

In addition, this list indicates the instances in which the ESOP trustee may wish to retain a financial adviser to provide a transactional fairness opinion:

1. The initial formation of the ESOP at the sponsor company
2. The final termination of the ESOP at the sponsor company
3. A significant purchase (initial or secondary) of stock by the ESOP
4. A significant financing vehicle related to the ESOP leveraged purchase of the sponsor company stock
5. A significant refinancing of the ESOP sponsor company stock acquisition debt
6. Whenever there is a stock purchase (or sale) transaction between the ESOP and a controlling stockholder (or a member of the sponsor company control group)
7. Stock purchase (or sale) transactions outside of the ESOP that significantly affect the capital structure of the sponsor company that may affect the value of the ESOP-owned employer shares
8. The response of the ESOP with regard to an acquirer's tender offer (solicited or unsolicited) to purchase all of (or the ESOP's ownership of) the sponsor company stock

In the first three situations, a transactional fairness opinion from an financial adviser is obviously appropriate.

There are less obvious situations where a change in the capital structure of the sponsor company could affect the value of the ESOP-owned sponsor company shares. In such circumstances, the opinion of the financial adviser to the ESOP may be helpful.

Examples of such situations include the following:

1. New shares of the sponsor company common stock are issued—this share issuance could result in the dilution of the value of the ESOP-owned sponsor company shares.
2. A preferred stock (or other preferred security) is created and distributed—this new security (a) may give another equity holder a superior right to sponsor company dividends and (b) may result in a decrease in the value of the ESOP-owned sponsor company stock.
3. The sponsor company recapitalizes and finances a large amount of long-term debt—the ESOP-owned sponsor company stock value may decrease because another stakeholder has a superior claim in the event of the sponsor company liquidation.

## THE ROLE OF THE TRUSTEE IN THE ESOP SPONSOR COMPANY STOCK PURCHASE (OR SALE) TRANSACTION

Every qualified ESOP is part of a trust that is governed by ERISA. Each trust is governed by a trust document that specifies the duties and responsibilities of the ESOP trustee.

Under ERISA Section 404(a)(1), a fiduciary—that is, the ESOP trustee—must approach the employer corporation stock purchase/sale transaction “with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.”

The sponsor company should carefully select the ESOP trustee, as the trustee's fiduciary obligations are significant. The ESOP trustee may potentially be a “party in interest”—generally defined as a corporate officer, employee, or a more than 10 percent shareholder—but the selection of such a trustee is not advisable. The ESOP trustee selection is a serious process because a fiduciary can be held personally liable for his or her actions.

Many sponsor companies will retain an institutional trustee for purposes of independence. Ultimately, it is the ESOP trustee's responsibility to make the investment decision to purchase (or sell) the sponsor company stock on behalf of the ESOP.

ERISA Section 401(a)(28)(C) provides that, after 1986, the annual valuations of the sponsor company securities that are not readily tradable must be conducted by an independent appraiser. Therefore, the financial adviser to the ESOP trustee must be independent of all parties to the leveraged ESOP stock purchase (or sale) transaction.

The financial adviser to the ESOP should be retained by—and report directly to—the ESOP trustee. The agreement between the ESOP trustee and the financial adviser should define the type of transaction opinions that the independent financial adviser is expected to prepare.

The following discussion summarizes the different types of transaction opinions that the financial adviser may be asked to provide to the ESOP trustee.

### The Adequate Consideration Opinion

The first (and arguably the most important) opinion that the financial adviser may prepare is whether

the price paid by the ESOP for the sponsor company stock is greater than the adequate consideration.

Adequate consideration is defined by ERISA Section 3(18)(B) as “the fair market value of the asset as determined in good faith by the trustee or named fiduciary . . . pursuant to the terms of the plan and in accordance with regulations promulgated by the Secretary of Labor.”

Fair market value is defined by the U.S. Department of Labor proposed regulations as the amount at which the company stock would change hands between a willing buyer and a willing seller, each having reasonable knowledge of all relevant facts, neither being under any compulsion to act, and with equity to both.

In order to analyze “adequate consideration,” the financial adviser will conduct a thorough and well supported valuation analysis that:

1. considers all generally accepted business valuation approaches and methods and
2. provides the ESOP trustee with the necessary justification for the adequate consideration opinion.

## Fairness from a Financial Point of View

The adequate consideration test is sometimes referred to as the absolute fairness test. Essentially, the adequate consideration question is: Does the sponsor company stock price to be paid by the ESOP exceed some benchmark that represents fair market value?

The “fairness from a financial point of view” opinion incorporates the concept of relative fairness. The financial adviser should also advise the ESOP trustee as to whether the sponsor company stock price to be paid by the ESOP is fair relative to the price that would be paid by any other investors.

The essence of the relative fairness test is a comparison of:

1. the relative investment risk accepted by each investor and
2. the expected investment return associated with that risk.

In the typical ESOP leveraged stock purchase transaction (for example, where a senior lender provides all of the acquisition financing), the fairness opinion may consider the concepts of relative fairness and absolute fairness converge.

Since there are no additional parties to the leveraged sponsor company stock purchase transaction other than the senior lender, the determination of relative

fairness is based on whether the terms of the senior financing are fair relative to the ESOP.

In a multi-investor ESOP capital structure, however, relative fairness may become a significant issue. The allocation of equity to the various stock purchase transaction participants in the ESOP

leveraged stock purchase can affect the internal rate of return (“IRR”) earned by each transaction participant. The relative IRRs can affect whether the stock purchase transaction is fair from a financial point of view.

Accordingly, in sponsor company stock purchase transactions with more than one investor, the ESOP trustee should be involved in analyzing both:

1. the sponsor company stock purchase by the ESOP and
2. the sponsor company stock purchase by the other transaction participants.

Measuring the IRR for each investor is one way to measure the fairness of the sponsor company stock purchase transaction to each of the transaction participants. As investment risk increases among the various classes of sponsor company debt and equity securities, the expected rate of return should also increase.

The subject transaction relative investment IRRs can be compared to empirical, market-derived returns of publicly traded securities with similar investment risk characteristics.

## The Reasonableness of the Sponsor Company Stock Conversion Premium

The ESOP trustee may require an opinion as to the reasonableness of the stock conversion premium if:

1. the ESOP purchases a sponsor company security other than common stock and
2. that security has a dividend preference.

The stock conversion premium is measured as the price premium paid for the preferred dividend security—in excess of the value of the sponsor company common stock.

The value of a dividend preference security is typically equal to (1) the value of the sponsor

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**“As investment risk increases among the various classes of sponsor company debt and equity securities, the expected rate of return should also increase.”**

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company common stock plus (2) the value of the dividend preference. Therefore, the price premium paid for the preferred security is typically related to the value of the dividend preference.

To assess the reasonableness of the stock conversion premium, the financial adviser will typically consider guideline publicly traded securities with similar investment characteristics and risk attributes.

For both the sponsor company security and the guideline publicly traded securities, the financial adviser will typically compare the following ratios:

1. Dividend coverage ratio
2. Capitalization ratio
3. Fixed charge coverage ratio
4. Debt to equity ratio

The financial adviser performs this comparison in order to assess the relative risks applicable to the sponsor company security, and therefore, the reasonableness of the stock conversion premium.

## The Reasonableness of the ESOP Stock Acquisition Debt Terms and Conditions

Since the terms of the sponsor company stock purchase transaction can also affect the purchase price, the financial adviser should also review the terms of the ESOP acquisition debt. The terms of the ESOP stock acquisition debt that can affect the stock price are as follows:

1. The interest rate
2. The term of the financing

A comparison of the ESOP stock acquisition debt terms with empirical debt market evidence can indicate whether these terms are reasonable in the current economic environment. The financial adviser's analysis of current market interest rates should indicate whether the interest rate on the ESOP stock acquisition debt is a market interest rate.

The financial adviser should also consider the implied quality rating on the ESOP stock acquisition debt. The financial adviser typically performs that comparison with appropriately rated publicly traded debt instruments.

For example, if the ESOP stock acquisition debt represents 80 percent of the sponsor company total invested capital value, that debt may be rated lower than if the ESOP stock acquisition debt represented only 20 percent of the sponsor company total invested capital value.

## SUMMARY AND CONCLUSION

The criteria for an ESOP formation sponsor company candidate criteria described in this discussion can serve as a simple checklist for closely held company owners—and for their professional advisers. Closely held company owners (i.e., the potential selling shareholders) and their professional advisers can use this simple checklist as they consider the difficult issues related to:

1. closely held company ownership transition and management succession and
2. the diversification/ liquidity of the closely held company owner's investments.

Careful planning is important to the ultimate success of the implementation of ESOP leveraged purchase of the sponsor company stock. An ESOP formation financial feasibility analysis can take different forms. A written narrative feasibility analysis is not necessarily a requirement.

What is important is that the financial adviser should carefully consider the goals and objectives of:

1. the sponsor company selling shareholders,
2. the sponsor company itself, and
3. the to-be-formed ESOP participants.

The implementation of an ESOP can be one of the most important events in the life cycle of the employer corporation. The ESOP formation planning process should be performed with care, and it should involve all of the necessary financial and legal advisers.

Finally, ESOP trustees are responsible for demonstrating that, during the course of analyzing the pending sponsor company stock purchase (or sale) transaction:

1. appropriate due diligence procedures were conducted and
2. the purchase/sale transaction price was at a price not greater than fair market value.

This responsibility of the ESOP trustee is well established by judicial precedent.

Therefore, the written advice of the financial adviser to the ESOP is important evidence in the analysis of a potential sponsor company stock purchase (or sale) transaction. The benefit of obtaining a financial adviser's transactional fairness opinion is apparent if there is any chance that the ESOP trustee's investment decision may ever be challenged in the future.





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# The Identification and Quantification of Valuation Adjustments in Closely Held Business or Security Valuations for Gift Tax or Estate Tax Purposes

*Valuation analysts (“analysts”) are often asked to value closely held businesses and business ownership interests (including debt and equity securities) for federal gift tax, estate tax, and generation-skipping transfer tax purposes. These business-related valuation analyses may be performed for tax planning, tax compliance, and/or tax controversy purposes. In the process of conducting the business valuation analysis, analysts often have to apply valuation adjustments to preliminary value indications—in order to reach final value conclusions and opinions. The type of—and the magnitude of—these valuation adjustments may vary depending upon which generally accepted business valuation approaches and methods the analyst applied as part of the business valuation process. As will be summarized in this discussion, there are many types of valuation adjustments that the analyst may have to consider. Typically, all of these valuation adjustments can be grouped into one of two categories: systematic adjustments and nonsystematic adjustments.*

*Systematic and nonsystematic valuation adjustments can be either decremental (called valuation discounts) or incremental (called valuation premiums). Systematic adjustments are discounts or premiums that affect business and security valuations across the board—such as the so-called “level of value” adjustments. Nonsystematic adjustments are discounts or premiums that relate to an individual subject company or subject security—such as key customer dependence or specific buy/sell shareholder agreement transferability restrictions.*

*This discussion explains the common procedures that analysts apply to identify the factors or conditions for a nonsystematic valuation adjustment in a business or security valuation performed for tax planning, compliance, or controversy purposes. This discussion explains the common procedures that analysts apply to quantify nonsystematic valuation adjustments. This discussion includes several simplified illustrative examples of business valuation adjustment analysis. And, finally, this discussion considers the appropriate sequencing of nonsystematic valuation adjustments in a business or security valuation performed for tax planning, compliance, or controversy purposes.*

*The original version of this discussion was published in the Special Issue 2006 issue of Insights under the title “Valuation Adjustments (Discounts and Premiums) in Business/Stock Valuations for Estate Planning or Estate Tax Purposes.” Trey Stevens was the author of the original discussion.*

## INTRODUCTION

The application of valuation adjustments is a common procedure in the development of a closely held business and/or security valuation performed for federal gift tax, estate tax, or generation-skipping transfer tax purposes.

Valuation adjustments can be either valuation discounts (decremental—or value decreasing—adjustments) or valuation premiums (incremental—or value increasing—adjustments). There are “level of value” valuation adjustments that valuation analysts (“analysts”) routinely consider in many taxation-related business and security valuation assignments.

These so-called level of value adjustment considerations include the following:

1. The degree of ownership control or lack of control of the subject or business ownership interest
2. The degree of marketability or lack of marketability of the subject business or business ownership interest

The analyst’s consideration of such level of value adjustments is a common analytical procedure in a closely held business or security valuation. This is because the various generally accepted business valuation approaches and methods typically conclude different levels of value.

These type of level of value valuation adjustments are typically called systematic adjustments. These systematic valuation adjustments typically apply (1) across various industries and (2) across various company types and sizes.

The application of systematic valuation adjustments is influenced by the following:

1. The legal/economic characteristics of the subject business security, or business ownership interest (e.g., does the subject ownership interest represent target company operational or other ownership control of the closely held company or not?)
2. The selected and appropriate standard of value (e.g., fair market value, fair value, investment value, etc.)
3. The selected and appropriate premise of value (e.g., which alternative premise of value represents the highest and best use of the subject closely held business or security?)

This discussion summarizes these systematic (or level of value) adjustments in order to contrast

such adjustments with nonsystematic valuation adjustments. This discussion primarily focuses on the identification of—and quantification of—nonsystematic valuation adjustments.

As the name implies, these nonsystematic valuation adjustments do not apply across the board to all business ownership interests of the same level of value. While nonsystematic adjustments should be considered in all tax-related business or security valuations, they are typically applied less often.

## CATEGORIES OF NONSYSTEMATIC VALUATION ADJUSTMENTS

Nonsystematic valuation adjustments typically fall into the following four categories:

1. Company-specific adjustments
2. Security-specific adjustments
3. Contract-imposed adjustments
4. Multitier adjustments

These four categories of valuation adjustments are described in greater detail later in this discussion. As an introductory explanation, these adjustments relate to some factors that are specific to the individual valuation subject (e.g., the subject block of securities ) that would cause the analyst to apply a valuation discount or premium.

One example of a company-specific valuation adjustment may be key customer dependence. For example, let’s assume that 90 percent of the annual revenue of a subject industrial/commercial company comes from one retail chain customer. That subject company suffers from key customer dependence. And, the valuation of that company should reflect that dependence risk.

One example of a security-specific valuation adjustment may be supervoting rights. For example, let’s assume that the valuation subject is the Class B common stock that enjoys 100 votes per share, compared to the one vote per share enjoyed by the subject company’s Class A common stock. That Class B common stock benefits from these supervoting privileges. And, the valuation of that Class B stock should reflect that benefit.

One example of a contract-imposed adjustment may be if the subject block of stock is subject to a shareholder agreement. For example, let’s assume that the shareholder agreement allows the company to call the subject stock at any time at a call price that is equal to its accounting net book value. That contractual call option will affect the value of the subject block of stock.

One example of a multitier adjustment may be a family limited partnership (“FLP”) interest that owns the remaining nonmarketable, noncontrolling stock of a closely held corporation. An analyst may apply a multitier adjustment when the subject corporation owns a substantial amount of liquid assets but neither (1) the subject FLP interest nor (2) the subject closely held stock interest has the right to demand an income distribution or asset liquidation. This illustrative FLP ownership interest suffers from both a lack of ownership control and a lack of marketability.

These illustrative nonsystematic valuation adjustments do not relate to the level of value of the subject business ownership interest or security. And, these illustrative adjustments do not apply across a broad range of valuation subjects. Rather, the application of nonsystematic valuation adjustments is specific to the facts and circumstances of each individual tax-related business valuation subject.

In contrast, while the quantification of nonsystematic adjustments is unique to each individual valuation subject, systematic valuation discounts and premiums are common across a broad range of tax-related business valuation subjects.

This discussion concludes with a summary of general analyst caveats related to the identification and quantification of nonsystematic valuation adjustments in closely held business and security valuation analyses. Analysts (and taxpayers and tax counsel) should consider these general analyst caveats with regard to a business or security valuation prepared for tax planning, compliance, or controversy purposes.

## ANALYST CONSIDERATIONS REGARDING VALUATION ADJUSTMENTS

### Adjustments Are Not Made from a Value Conclusion—But Rather to Conclude a Value

First, both systematic and nonsystematic valuation adjustments are always made in order to reach a conclusion of value. Valuation adjustments (i.e., systematic or nonsystematic adjustments) are not made from a conclusion of value.

Inexperienced valuation analysts are often confused by this important distinction. Inexperienced analysts believe that the analyst first reaches a conclusion of the correct value for the subject busi-

ness ownership interest. Then, inexperienced analysts erroneously believe that the analyst applies a discount or premium to the concluded value in order to arrive at a discounted value—or an inflated value.

This misconception is both procedurally and conceptually incorrect. In contrast, analysts actually apply valuation methods to arrive at value indications. Each generally accepted business or security valuation method involves numerous analytical procedures.

The various generally accepted business valuation methods provide preliminary indications of value—until all of the requisite procedures are performed. And, one of the requisite procedures in all generally accepted business valuation methods is to consider (and apply, when appropriate) valuation discounts and premiums.

So, valuation adjustments are applied to a preliminary value indication in order to arrive at a final value conclusion. Valuation adjustments are not applied to a final value conclusion—to arrive at either a discounted value conclusion or an inflated value conclusion.

### Implicit Adjustments versus Explicit Adjustments

Second, regarding both systematic and nonsystematic adjustments, the application of valuation adjustments—and the magnitude of the valuation adjustments—may vary based on each valuation approach and method.

There are two components to this analyst consideration:

1. Implicit level of value, systematic adjustments
2. Implicit/explicit quantification of nonsystematic adjustments

Some generally accepted business valuation approaches and methods typically provide a certain indicated level of value. For example, the market approach/guideline publicly traded company method typically arrives at a marketable, noncontrolling ownership interest level of value.

Typically, the asset-based approach/asset accumulation method arrives at a marketable, controlling ownership interest level of value.

Typically, the income approach/discounted cash flow method can arrive at either a controlling or a noncontrolling ownership interest level of value. The indicated level of value depends on the individual valuation variables selected for both (1) the cash

flow projection and (2) the present value discount rate.

In each of these instances, the application of a systematic, level of value valuation adjustment will depend on both:

1. the level of value typically indicated by the selected valuation approach and method and
2. the individual valuation variables used in the specific application of that business valuation method.

Therefore, within the same tax planning, compliance, or controversy valuation assignment, systematic adjustments may apply to some valuation approaches and methods—but not to others. And, depending on the individual valuation variables used within the particular business valuation method, different magnitudes of the same valuation adjustment (e.g., the discount for lack of marketability) may apply between the different valuation approaches and methods applied.

Regarding nonsystematic valuation adjustments, sometimes the analyst may make an adjustment implicitly within an individual valuation method analysis. And, sometimes, the analyst may apply an explicit adjustment to the value indication concluded by the individual valuation method.

For example, let's consider a discount for key person dependence. The key person could be the chief executive officer, chief marketing officer, chief design engineer, or any other senior—and strategically important—executive. If the analyst uses the income approach/discounted cash flow method, the analyst could quantify a key person dependence discount either implicitly or explicitly.

Implicitly, the analyst could adjust the cash flow projection for the cost to recruit, hire, train, and maintain a hypothetical replacement executive (e.g., a first lieutenant for the key executive).

Explicitly, the analyst could arrive at an unaffected preliminary business enterprise value indication—and then subtract either a discrete percentage discount or a discrete dollar discount (for the key person dependence) from the preliminary value indication.

As another example, let's consider a discount for lack of voting rights related to the valuation of



the class B nonvoting common stock (e.g., a class of stock retained by the founding family). Again, the analyst may quantify this valuation adjustment either implicitly or explicitly.

If the analyst uses the market approach/guideline publicly traded company method, the valuation adjustment could be made within the analytical procedures—to arrive at an implicitly discounted value indication. Or, the valuation procedures could be performed on unaffected basis, and the preliminary value indication could be explicitly adjusted for the discount.

Implicitly, the analyst could compare the multiples of relevant guideline companies that have supervoting shares to the multiples of the same company's shares with lower voting rights and recognize that relationship when selecting multiples to apply to the subject company. The application of such pricing multiples would arrive at a final value indication that is implicitly affected by a lack of voting rights.

Alternatively, the analyst could select voting guideline company stocks from which to extract market-derived valuation pricing multiples. The application of such valuation pricing multiples would arrive at a preliminary value indication that would need to be explicitly adjusted by a percentage discount for lack of voting rights.

## Standard of Value Influences

Third, regarding both systematic and nonsystematic adjustments, the application of adjustments is directly affected by the standard (or the definition) of value sought in the gift-tax-related and estate-tax-



related business or stock valuation. If the assignment standard of value is fair market value (as is the case with tax-related business valuations), then most valuation adjustments will typically apply.

This is because the marketplace of willing buyers and willing sellers will generally recognize all valuation discounts and premiums.

However, if the assignment standard of value is fair value (as is typically the case with regard to statutory dissenting shareholder appraisal rights matters or shareholder oppression matters), then certain systematic, level of value adjustments may not be considered.

In many situations (as required either by statute or by judicial precedent), fair value is synonymous with pro rata business enterprise value. This pro rata business enterprise analysis concludes a value that is legally “fair” to all parties to the subject shareholder rights litigation.

That is, business enterprise value is the level of value where all shares of stock in the subject company have the same value per share. This is true regardless of whether the shares are owned by a 90 percent controlling stockholder or by a 10 percent noncontrolling stockholder. At the business enterprise level of value, the one stockholder receives no economic reward for either squeezing out or oppressing another stockholder.

For example, under this interpretation of fair value, the controlling stockholder is not allowed to pay a “discounted” price of \$10 per share to the noncontrolling stockholder for shares that are worth \$20 per share to that controlling stockholder.

Therefore, in many fair value business valuation assignments, certain valuation adjustments are usually not applicable—even if the subject block of stock is a nonmarketable, noncontrolling ownership interest.

The valuation principles that support this level of value in a fair value analysis are often called “the economics of fairness.”

Similarly, let’s consider the example of an investment value (or owner value) assignment. In such an assignment, the analyst may not apply a nonsystematic discount for a suboptimal product distribution function at the subject company.

If the current corporate owner wants to quantify the value to itself (given its specific corporate investment criteria) of a certain subsidiary, a discount for the lack of a distribution function may not be relevant. Let’s assume that the corporate parent is a company like Pfizer—that is, a multinational pharmaceutical company that is recognized for its world class product distribution function.

Let’s assume that the current corporate parent operates the subject company as a manufacturing subsidiary that effectively sells all of its production to a market/distribution subsidiary. For an investment value analysis, the lack of the subject company’s distribution system would not represent a value penalty to the current owner. Therefore, the analyst may not apply a nonsystematic lack of distribution function discount in an investment value analysis for a Pfizer-like corporate owner.

As another example, let’s assume an acquisition value transactional assignment for a corporate acquirer. Let’s assume that the subject target company clearly suffers from key person dependence. Let’s assume that the target company founder is a key person who will retire at the time that the company is acquired.

The potential acquirer is a large, publicly traded corporation that has several tiers of mid-level executives who are qualified to (and waiting for the opportunity to) manage a company the size of the target company.

The acquisition value standard of value indicates what a specific buyer would be willing to pay to a specific seller for the subject business interest.

The analyst may decide not to apply a nonsystematic key person dependence discount in the acquisition value assignment for this particular acquirer given (1) the acquisition value standard of value and (2) the fact that the target company key person dependence does not represent a deficiency to the specific corporate acquirer.

## NONSYSTEMATIC VALUATION ADJUSTMENTS

Something that is nonsystematic is not orderly, regular, or consistent. Nonsystematic valuation adjustments are discounts or premiums that should be considered—but are not necessarily applied—in all business or security valuations. Rather, nonsystematic adjustments are specific to the individual facts and circumstances of a particular valuation subject business or security ownership interest.

Nonsystematic valuation adjustments generally are grouped into the following four categories:

1. Company-specific
2. Security-specific
3. Contract-specific
4. Multitier

Each of these four categories of nonsystematic valuation adjustments is discussed below.



## Company-Specific Valuation Adjustments

Company-specific valuation adjustments relate to facts and circumstances that are specific to the subject business or security. Some common examples of company-specific valuation adjustments include the following:

1. Discount for key person dependence
2. Discount for key customer dependence
3. Discount for key supplier dependence
4. Discount for key product/technology dependence
5. Discount for suboptimal capital structure
6. Discount for suboptimal cost of capital

These company-specific valuation factors can be either controllable or noncontrollable. That is, some of these factors can be controlled (or eliminated) due to the actions of the company management. For example, to eliminate interest rate fluctuation risk, the subject company management could decide to employ a 100 percent equity capital structure.

As an example of an uncontrollable risk factor, let's assume that there may be only one domestic supplier for the company's key medicinal chemicals component. In that case, management's reliance on the key supplier is an example of an uncontrollable decision.

In any event, all of these company-specific factors first affect the company valuation at the business enterprise level. These company-specific risk factors are not related to the level of value of an individual shareholder's subject ownership interest. And, these risk factors typically do not affect one class of company security at the expense of another class of company security.

Each of the risk factors in this category makes the subject company different (from an investment risk and/or expected return perspective) from the typical company in the subject industry or the subject peer group. Accordingly, this category of valuation adjustment is typically made at the company (invested capital or total equity) level.

## Security-Specific Valuation Adjustments

Security-specific valuation adjustments relate to facts and circumstances that are specific to the subject security interest or the subject block of stock.

Some common examples of security-specific valuation adjustments include the following:

1. Discount for lack of voting rights
2. Premium for supervoting rights
3. Blockage discount
4. Discount for lack of preemptive rights

All of these security-specific risk factors first affect the valuation at either:

1. the class of security level (e.g., a discount for lack of voting rights may be applied to all of the nonvoting common stock) or
2. the specific subject security level (e.g., a blockage discount may be applied to a 25 percent block of stock in an inactive public company).

And, each of the security-specific risk factors in this category makes the subject security interest different (from an investment risk and/or expected return perspective) from either:

1. the typical security in the subject company or
2. a guideline or benchmark security used for comparative pricing purposes.

In any event, this category of valuation adjustment is typically applied at the subject security level (e.g., at the per share of stock level) and not at the total business enterprise level.



## Contract-Specific Valuation Adjustments

Contract-specific valuation adjustments relate to facts and circumstances that are imposed on the subject security by the influences of a contract, agreement, regulation, or covenant. Some common examples of contract-specific valuation adjustments include the following:

1. Stock that is subject to the buy-sell provisions of a shareholder agreement
2. Restricted publicly traded stock
3. Founder, letter, or other unlisted stock of a listed public company
4. Partnership units subject to a partnership agreement and limited liability company (“LLC”) member units subject to an LLC member agreement

All of these factors affect the valuation of the specific subject ownership interest as the result of an exogenous influence. That exogenous influence is the result of a particular ownership interest being subject to the terms and conditions of some type of contract or agreement. These types of contract-specific restrictions are common in the case of equity that is owned by a private equity investor.

The contract terms may involve put, call, transfer, or ownership restrictions of a stockholder, LLC, or FLP agreement. The contract terms may affect the income distribution or the asset liquidation proceeds rights of the subject ownership interest.

In some cases, the contract terms may positively enhance the transferability of the subject ownership interest—such as the put option on ESOP-owned sponsor company common stock that is a contractual condition of ESOP trust agreements.

The exogenous influence may be the result of an employment agreement. Such an employment agreement may prohibit the company executive from selling the subject stock:

1. while he or she remains an employee of the company or
2. for a specified number of years.

The exogenous influence may be the result of (1) an agreement with security underwriters or (2) a requirement of the Securities Exchange Commission (“SEC”) or of the stock exchange. Unlisted shares of stock of a publicly traded company (e.g., founder stock, letter or legend stock, or stock subject to SEC Rule 144) are typically subject to contractual and/or regulatory transferability restrictions.

Each of the factors in this category makes the subject business ownership interest different (from an investment risk and/or expected return perspective) from either:

1. the typical security of the subject company that is not subject to the contractual/regulatory influence or
2. a guideline or benchmark security used for comparative pricing purposes.

In any event, this category of valuation adjustment is typically applied at the subject ownership interest level (e.g., to the particular block of stock or other equity units).

## Multitier Valuation Adjustments

Multitier valuation adjustments relate to facts and circumstances that are specific to the ownership structure of the subject security interest. Some common examples of multitier valuation adjustments include the following:

1. Closely held corporation (“CHC”) stock owned by an FLP
2. Nonconsolidated CHC stock owned by another CHC
3. Any multitier ownership where a distribution will trigger the recognition of capital gains
4. A fractional or partial property ownership interest inside a CHC or FLP

Multitier valuation adjustments are sometimes referred to as inside/outside valuation adjustments. In the typical instance, asset A is owned by asset B, which may itself be owned by asset C. In this example, asset C is the valuation subject.

Typically, in order to receive income distributions, the owner of asset C must first liquidate assets A and B. Accordingly, there is a series of security-specific and/or contract-specific adjustments that should be applied in the valuation of the multitier ownership interest.

In the valuation of a multitier ownership interest, questions arise not only as to the magnitude of the appropriate valuation adjustments. Questions also arise as to the sequencing (and relative magnitude) of the appropriate valuation adjustments.

Typically, the lower level/inside adjustments are applied first, and the higher level/outside adjustments are applied second. That is, first adjustments are applied to asset A, and then an asset A cash equivalency value is estimated.

Then, second, adjustments are applied to asset B, and then an asset B cash equivalency value is estimated.

Finally, adjustments are applied to asset C, and then an asset C value is concluded.

## SYSTEMATIC VALUATION ADJUSTMENTS

Systematic events typically affect a broad population and occur with some regularity and order. This statement is also true of systematic valuation adjustments. These adjustments affect a broad range of valuation assignments. And, the analyst's application of systematic valuation adjustments occurs with regularity.

In fact, depending on the valuation approaches and methods used, virtually all closely held company business or security valuations involve either implicit or explicit systematic valuation adjustments. Accordingly, the analyst should consider the appropriateness of systematic valuation adjustments in most closely held company business or security valuations.

Although the category of systematic adjustments is not limited to level of value adjustments, these adjustments are a common type of systematic adjustment. There are two reasons for this. First, virtually every business or security valuation assignment involves a specified level of value. And, second, alternative valuation approaches and methods typically produce value indications at different levels of value.

Therefore, if the analysis involves two or more valuation approaches and methods, the analyst may have to apply some systematic adjustment in order to conform all of the value indications to the same level of value.

Typically, all value indications should be stated on the same level of value (typically, the level of value consistent with the valuation assignment) before a meaningful valuation synthesis and conclusion is reached.

Some of the common systematic valuation adjustments include the following:

1. Discount for lack of marketability (related to an ownership interest that is less than the total closely held business enterprise)
2. Discount for illiquidity (related to the analysis of the overall closely held business enterprise)
3. Discount for lack of ownership/operational control
4. Premium for ownership/operational control
5. Premium for strategic/synergistic benefits

The above-listed systematic adjustments relate to the level of value of the subject ownership interest. Many inexperienced analysts believe that there are only three or four discrete levels of value.

In fact, there is a virtually continuous spectrum of levels of value. And, the continuous spectrum itself typically has two axes:

1. Ownership control elements
2. Marketability elements

There is a broad spectrum of value influences ranging from:

1. absolute ownership/operational control with immediate synergistic opportunities to
2. absolute lack of ownership/operational control.

For example, an owner of a 30 percent block of closely held company stock may have significant elements of operational control if there are 70 other unrelated stockholders, each of whom owns only one percent of the closely held company stock. As another example, the owner of a two percent block of closely held company stock can experience the swing vote value influences of control if there are two other unrelated stockholders, each of whom owns 49 percent of the closely held company stock.

The owner of 51 percent of a closely held company stock usually has one level of ownership control. The value of that block of stock would likely enjoy some level of control premium. However, in many states, a two-thirds vote is legally required for many corporate "control events" (e.g., a corporate liquidation or a sale of substantially all of the company assets).

Therefore, the owner of a 67 percent block of stock may enjoy a greater control premium than the owner of a 51 percent block of stock.

Likewise, the ownership of 80 percent of a closely held company is required to consolidate a subsidiary for both financial accounting and income tax reporting purposes. That's why many acquirers won't pursue a target company unless they are sure of owning at least 80 percent of that company's stock.

Therefore, the owner of an 80 percent block of stock may enjoy a greater control premium than the owner of a 79 percent block of stock.

The owner of a 95 percent block of closely held company stock still has fiduciary obligations to the company's noncontrolling stockholders. The elimination of noncontrolling stockholders eliminates both this fiduciary duty and the possibility of nuisance litigation claims from dissenting noncontrolling stockholders.

Therefore, the owner of a 100 percent block of closely held company stock may enjoy a greater control premium than the owner of a 95 percent block of stock.

There is also a continuous spectrum of value influences with regard to marketability elements. This broad spectrum of value influences ranges from:

1. absolute liquidity (equivalent to that enjoyed by actively traded stock listed on a public stock exchange) to
2. virtually absolute illiquidity (imposed by FLP, stockholder, buy/sell agreement, or by an other contract/agreement that restricts transfer, limits potential buyers, and dictates sale price).

The multitier ownership structure of the subject security (e.g., a security owned by an entity that is

owned by another entity) may also have marketability implications that influence value.

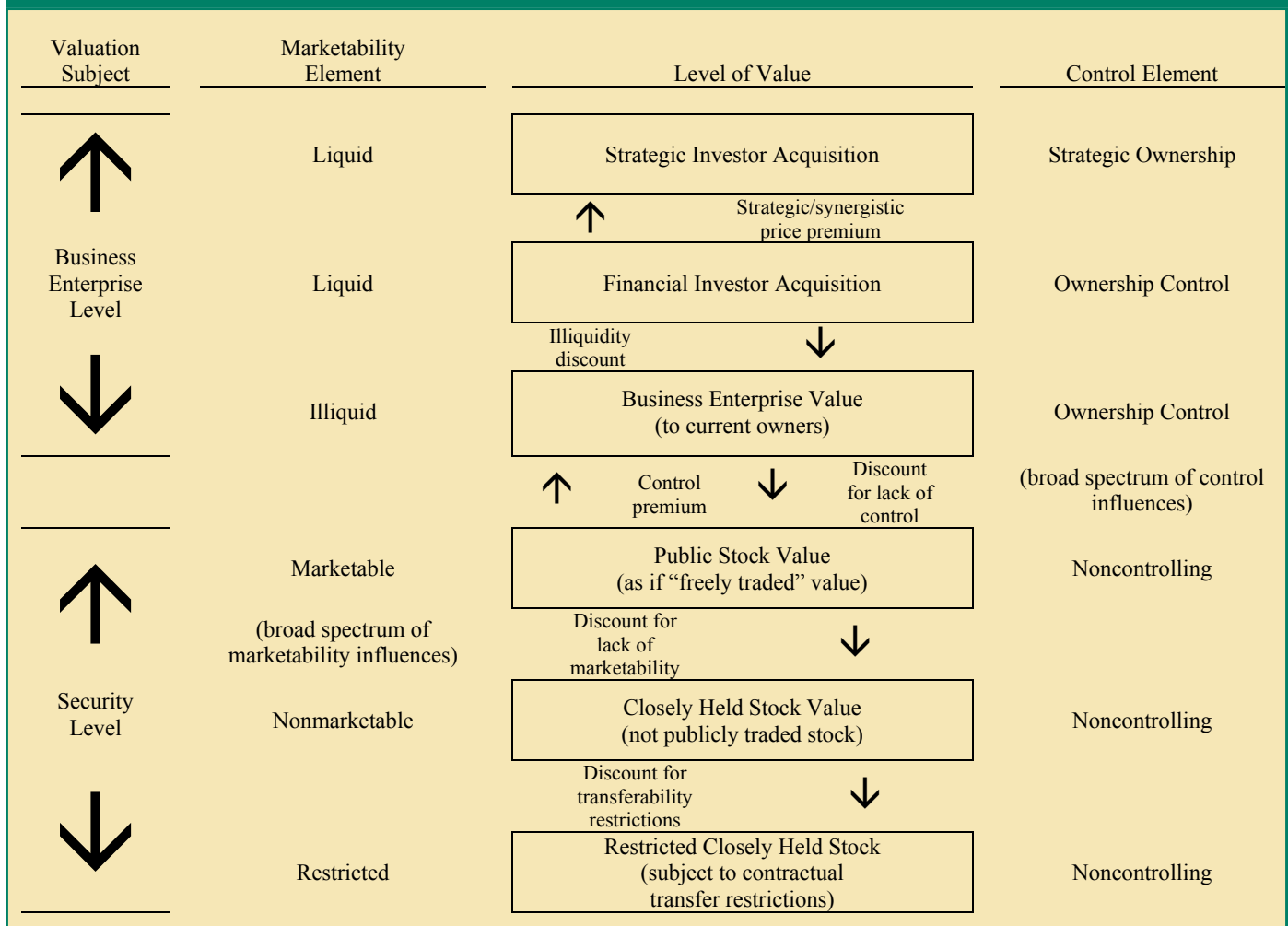
While it may be impossible for analysts to conceptualize all of the discrete steps along the control/marketability continuum, these two elements really represent a continuous spectrum of combined valuation adjustment possibilities.

However, for visualization and illustrative purposes only, Figure 1 represents several of the common levels of value with regard to a closely held business or security valuation. Where applicable, Figure 1 also presents simplified indications of the valuation discount/premium relationships among the common levels of value.

Nonsystematic valuation discounts and premiums may be quantified as either:

1. a percentage adjustment or
2. a dollar amount adjustment.

**Figure 1**  
**Closely Held Business or Security Systematic Valuation Adjustments**  
**Simplified Illustration of the Common Levels of Value**





When both percentage and dollar amount adjustments are appropriate, the analyst should carefully consider the appropriate sequence for applying the adjustments.

However, systematic valuation discounts and premiums (particularly level of value adjustments) are typically quantified as percentage adjustments. Therefore, if both control influence and marketability influence discounts/premiums are applied as percentage adjustments, then the mathematical sequencing of the application of systematic adjustments is often irrelevant.

That is, as long as they are all expressed on a percentage discount or premiums basis, the systematic valuation adjustments usually can be applied in any order.

## WHY VALUATION ADJUSTMENTS ARE IMPORTANT TO THE BUSINESS OR SECURITY VALUATION PROCESS

Experienced analysts understand that the concept of a valuation adjustment is meaningless without a clear answer to the question: adjustment to what? The analyst first has to understand the baseline or benchmark against which any valuation discount or premium is contemplated.

In other words, the application of any valuation discount or premium is fundamentally inappropriate unless the benchmark (against which the adjustment is compared) is clearly defined.

For example, it may be inappropriate to apply a discount for lack of marketability to a value indication that is already stated on a nonmarketable basis. Likewise, it may be inappropriate to apply an ownership control premium to a value indication that is already stated on a controlling ownership interest basis.

The first question for the analyst to ask with regard to a valuation adjustment is: What do I have? This question relates to what systematic and nonsystematic elements exist in the following:

1. The generally accepted business valuation approaches and methods selected
2. The individual valuation analysis variables selected
3. The guideline or other transactional data extracted
4. The valuation method value indications derived.

These elements (which either are present or are absent) represent the baseline or benchmark of the business or security valuation analysis.

The second question for the valuation analyst to ask with regard to a valuation adjustment is: What do I want? This question relates to what systematic and nonsystematic elements exist in:

1. the subject company and/or
2. the subject security/ownership interest.

In particular, the analyst is looking for operational, financial, contractual, and regulatory features of the subject company or security that are different from those of the benchmark analysis. These selected features should make the subject company or security different from the benchmark analysis from an investment risk/expected return perspective.

It may be obvious why the analyst should thoroughly understand the benchmark analysis first. At this point in the valuation, the benchmark analysis is what the analyst has. Ideally, the benchmark analysis should perfectly match the subject company or security from an investment risk/expected return perspective.

This is because an analysis of the subject company or security is what the analyst wants. If the elements in the benchmark analysis match up perfectly with the elements in the subject company or security, then no valuation adjustment is needed. Of course, that occurrence is rarely the case.

Therefore, the third question for the analyst to ask with regard to a valuation adjustment is: How is the subject company or security different from the benchmark analysis? When answering this question, the analyst should identify all of the systematic and nonsystematic elements in the valuation subject that are not in the benchmark analysis—and vice versa.

Finally, the fourth question for the analyst to ask with regard to a valuation adjustment is: How do I get to what I want from what I have? In other words, what transactional adjustments are needed to make the value indications/conclusions of the benchmark analysis more applicable to the valuation subject?

Alternatively, what valuation adjustments are needed to minimize the systematic and nonsystematic element differences between the benchmark analysis and the valuation subject?

It is noteworthy that this fourth question helps the analyst to identify valuation adjustments that make the investment risk/expected return features of the benchmark analysis look more like the



valuation subject. It is not the objective of valuation adjustments to make the investment risk/expected return features of the subject company or security look more like the benchmark analysis.

In summary, valuation adjustments are only applicable to make the benchmark or baseline analysis look more like the subject company or security from an investment risk/expected return perspective. Therefore, it is important that the analyst fully understand the systematic and nonsystematic elements of the benchmark analysis before any valuation adjustments are considered.

In addition, the selection of the valuation adjustments is influenced by the following:

1. The specific business valuation approaches, methods, and procedures performed
2. The purpose and the objectives of the analysis, including the standard of value and the premise of value that is appropriate for the individual valuation assignment

## ILLUSTRATIVE LISTING OF VALUATION ADJUSTMENTS

Exhibit 1 presents a noncomprehensive listing of valuation discounts and premiums. Exhibit 1 does not distinguish between systematic (or level of value) adjustments and nonsystematic adjustments.

While Exhibit 1 is not intended to be comprehensive, it may provide a convenient valuation adjustment checklist or reminder list for the analyst who is performing a gift-tax-related or estate-tax-related business or security valuation.

## METHODS TO QUANTIFY VALUATION ADJUSTMENTS

There are numerous analytical procedures that are used to quantify individual valuation adjustments. When considered conceptually, all of these individual

### Exhibit 1 Closely Held Business or Security Valuation Adjustments Illustrative List of Common Valuation Discounts and Premiums

#### Valuation Discounts Related to:

Assignee ownership interest  
Blockage (size) of public stock  
Built-in capital gains taxes  
Call options  
Founder/letter/legend stock  
Illiquidity (at business enterprise level)  
Key customer dependence  
Key person dependence  
Key supplier dependence  
Key technology dependence  
Lack of dividend rights  
Lack of marketability (at security level)  
Lack of ownership/operational control  
Lack of preemptive rights  
Lack of voting rights  
Multitier ownership structure  
Partial/fractional ownership interest  
Right of first refusal  
SEC Rule 144  
Suboptimal capital structure  
Suboptimal cost of capital  
Transferability restrictions (contractual)  
Unlisted stock of public company

#### Valuation Premiums Related to:

Ownership/operational control  
Put options  
Strategic/synergistic benefits  
Superliquidation preference  
Supervoting rights

procedures are grouped into four categories of methods:

1. Comparative empirical data regarding the valuation subject
2. Comparative income data regarding the valuation subject
3. Published empirical data regarding valuation guidelines/benchmarks
4. Reliance on judicial/administrative guidance

Each of these four categories of methods is described below.

The first two above-listed methods use data extracted directly from the subject closely held company or security. If such data are available, then these methods provide valuation adjustment indications that are specifically derived from the valuation subject.

In the first method, the analyst compares the valuation subject to a benchmark or baseline that does not have the discount/premium value influence. Based on this comparison, the analyst extracts pricing metric data that are used to quantify the specific valuation adjustment.

In the second method, the analyst compares some measure of the valuation subject income to the same income measure, adjusted to exclude the effect of the valuation discount/premium. The capitalization of this income differential provides an indication of the appropriate amount of the valuation adjustment.

Using the comparative empirical data method, the analyst typically looks for comparative sales involving the subject security, where:

1. one sale doesn't have the particular discount/premium feature and
2. the otherwise comparable sale does have the particular discount/premium feature.

For example, let's assume that there were historical sale transactions involving two classes of the subject company stock: one class with voting rights and one class without voting rights. The analyst could examine these transactions and extract a discount for the lack of voting rights.

Likewise, let's assume that there were historical sale transactions involving (1) subject company stock that is subject to a right of first refusal and (2) otherwise comparable subject company stock that is not subject to a right of first refusal.

Again, the analyst could examine these transactions and extract a discount related to a contractual agreement right of first refusal.

Using the comparative income data method, the analyst typically identifies revenue, expense, or investment differences that are attributable to the particular discount/premium feature. The analyst attempts to quantify how the subject revenue, expenses, or investment would change if the particular discount/premium feature changes.

The analyst then capitalizes the expected income change over the remaining useful life (RUL) of the income change. The present value of the projected income difference provides an estimate of the amount of the valuation discount/premium.

For example, let's assume that Fred Founder is the controlling stockholder at Alpha Corporation, a closely held company. As the controlling stockholder, Fred Founder pays himself a salary that is \$1 million per year greater than a reasonable salary level for a comparable executive at a comparable company. The analyst is attempting to quantify the ownership control premium associated with Founder's stock ownership interest.

The analyst could (1) isolate the economic benefit associated with Founder's ownership control (i.e., his excess compensation) and (2) capitalize that economic benefit at an appropriate capitalization rate. The capitalized excess compensation would be one indication of the amount of Founder's ownership control premium.

All of the procedures related to the empirical data and the empirical income methods ultimately involve three types of analyses:

1. An estimate of the income shortfall related to the valuation discount; estimate of the excess income related to the valuation premium
2. An estimate of the cost to cure the deficiency feature
3. A paired sales analysis of (a) transactions with the subject discount/premium feature and (b) transactions without the subject discount/premium feature

The empirical data and empirical income methods rely on income, cost, or sales data extracted from the subject company in order to quantify the systematic or nonsystematic valuation adjustment. The published empirical data method is a common method to quantify valuation discounts and premiums. It is also a commonly misused method.

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## **“There are also numerous published studies with regard to non-systematic valuation adjustments. . . .”**

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Many analysts rely on published studies of empirical data to derive level of value adjustments, such as a discount for lack of marketability or a premium for ownership control. There are also numerous published studies with regard to nonsystematic valuation adjustments as well, such as a discount for lack of voting rights.

Most published empirical studies rely on the paired sales analysis procedure. These empirical studies analyze:

1. one set of sale transactions that are not affected by the subject feature and
2. one set of sale transactions that are affected by the subject feature.

The percentage difference in transaction prices (or the percentage difference in transaction pricing multiples) provides an indication of the amount of the individual valuation discount or premium.

The difference in this third method (compared to the first two methods) is that both sides of the paired sales analysis comparison relate to guideline company/security transactions. In other words, none of the data analyzed in these published studies actually comes from the subject company/security.

This factor should not invalidate the use of this empirical/study method. The concern regarding the use of this valuation adjustment quantification method is not the data source. The concern is how the analyst relies on the published study results to select subject-specific valuation adjustments.

Often, analysts rely on published empirical studies to estimate valuation adjustments:

1. without understanding the procedural mechanics of the particular published study,
2. without understanding the type (e.g., industry, size, etc.) of transactions analyzed in the particular published study, and
3. without considering the time period of the particular published study (compared to the subject valuation date).

In addition, analysts sometimes select the mean or median conclusion from the published study as

the appropriate valuation discount or premium in every business or security valuation. When this happens, the resulting analysis has not reflected the range of results indicated by published studies—such as the interquartile conclusions, the standard deviations, and the high/low observations.

And, the resulting analysis has not considered (qualitatively or quantitatively) exactly what valuation adjustment would be appropriate to the unique factors of the specific subject company or security—given the range of data reported in the published empirical study.

The fourth “method” for quantifying valuation adjustments considers published judicial precedent and administrative rulings (e.g., Internal Revenue Service (“Service”) audit settlement agreements) for guidance. While this method is sometimes used by inexperienced analysts, it is not recommended by experienced analysts.

This so-called “method” does provide the analyst with very useful information as to the reasonable range of valuation discounts and premiums that courts and regulators have found acceptable. However, these data do not provide a particularly reliable source of information from which to select a specific valuation adjustment related to a specific business valuation.

Judicial precedent, Service letter rulings and settlement agreements, and other administrative rulings are always fact-specific. By definition, they only apply to the specific facts and circumstances of the matter and/or taxpayer to which they apply. They are not intended to provide general guidance with regard to the level of valuation discounts and premiums that is appropriate in other situations.

Published judicial decisions (and other rulings) are only applicable to the extent that the subject company or security facts and circumstances are identical to the published decision facts and circumstances. And, that is hardly ever the case.

## **SUMMARY OF VALUATION ANALYST CAVEATS**

Exhibit 2 presents a nonexhaustive listing of caveats that analysts should consider with regard to the identification and quantification of valuation discounts and premiums for estate planning/estate tax valuations.

This summary of analyst caveats applies to each of the four above-described methods for quantifying valuation adjustments.

## Exhibit 2

### Closely Held Business or Security Valuation Adjustments

#### List of Analyst Caveats regarding Valuation Discounts and Premiums

1. Analysts should thoroughly understand the valuation analysis baseline or benchmark before applying any valuation adjustments.
2. Analysts should thoroughly understand the economic influences of the specific systematic or nonsystematic feature considered; that is, does it actually affect the investment risk and/or expected return of the subject closely held company or security?
3. Analysts should be careful not to “double count” valuation adjustments. For example, a valuation discount for the built-in gains tax may be a component of an overall discount for lack of marketability—and not a separate, discrete valuation adjustments.
4. When analysts use alternative procedures to quantify valuation adjustments (e.g., income shortfall/excess, cost to cure, paired sales analysis), the lower valuation adjustment indication is often an appropriate valuation adjustment conclusion.
5. Analysts should not solely rely on published judicial precedent as the basis of selecting specific valuation adjustments, unless the facts and circumstances in the subject valuation are identical to those considered in the published decision.
6. Analysts should be aware that not all business valuation methods/value indications may be subject to the same valuation adjustment—or to the same magnitude (either dollar amount or percentage) of valuation adjustment.
7. Analysts should recognize that the application of valuation adjustments is influenced by the purpose and the objective of the analysis (e.g., the assignment standard of value, the premise of value, etc.) as well as by the specific features of the subject closely held company or security.
8. Analysts should be sufficiently familiar with the content and intent of published empirical valuation adjustment studies before relying on such published studies as the basis of selecting a specific valuation discount or premium.
9. Analysts should carefully consider the time period covered in any published empirical valuation adjustment study before relying on that published study for use as of a specific valuation date.
10. Analysts should carefully consider the dispersion of the results reported in published empirical valuation adjustment studies. Valuation analysts should avoid the naive reliance on mean or median results of such published studies without considering whether such conclusions are applicable to the specific facts and circumstances of the subject closely held company or stock valuation.

## SUMMARY AND CONCLUSION

This discussion focused on the identification and the quantification of nonsystematic and multi-tier valuation adjustments. This discussion also touched on the identification and quantification of systematic (e.g., level of value) valuation adjustments.

This discussion considered both when and why valuation adjustments are applicable in the valuation of closely held companies and securities for gift tax and estate tax purposes. This discussion presented an illustrative (but nonexhaustive) list of business or security valuation discounts and premiums that analysts may consider in valuations

performed for tax planning, compliance, or controversy purposes.

In particular, this discussion presented (1) four common methods for quantifying valuation adjustments and (2) three common procedures for quantifying valuation adjustments. Comparative conceptual/practical strengths and weaknesses of the various valuation adjustment methods were discussed.

And, this discussion presented a nonexhaustive list of caveats that analysts should consider when selecting specific business/security valuation discounts and premiums for federal gift tax, estate tax, or generation-skipping transfer tax purposes.



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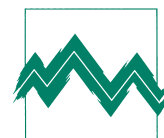
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# Due Diligence Procedures in the Commercial Litigation Economic Damages Analysis

*Forensic accountants and other damages analysts (“analysts”) are often called on to perform consulting expert and testifying expert services with respect to commercial litigation disputes. In particular, those analysts are called on to measure the amount of damages suffered by the plaintiff in the dispute as a result of the wrongful actions of the defendant in the dispute. This discussion introduces the economic damages measurement methods that are typically applied by such analysts. This discussion focuses on the reasonable due diligence procedures that analyst perform related to such damages measurements. These due diligence procedures relate to the collection of—and assessment of—the data and the documents that the analyst relies on in the economic damages measurement process*

*A previous version of this discussion was published in the Spring 2013 issue of Insights. It was titled “Intangible Asset Economic Damages Due Diligence Procedures,” and it was originally authored by Robert F. Reilly, CPA.*

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## INTRODUCTION

Industrial and commercial companies can become involved in commercial litigation disputes as either plaintiffs or defendants. This statement is true for companies participating in all industry sectors. Commercial litigation disputes could involve either breach of contract claims or tort claims. One common denominator in these disputes is that one party, usually the plaintiff, claims to have suffered economic damages due to the alleged wrongful actions of the other party, usually the defendant.

The plaintiff can ask the judicial finder of fact to award various types of nonmonetary remedies in the commercial litigation. These nonmonetary remedies could include an injunction of the wrongful action, a repossession of the taken property, the specific performance of a contract, a substitutional remedy (e.g., a new contract), and many others.

However, the plaintiff in the commercial litigation also typically asks for the award of monetary compensation as the remedy for the amount of

economic damages suffered. Therefore, a common question in most commercial litigation disputes is: What is the appropriate measurement of the damages suffered by the claimant/damaged party as a result of the wrongful actions of the defendant/damaging party?

Forensic accountants are often asked to measure the amount of economic damages in these commercial litigation disputes. For purposes of this discussion, a forensic accountant is simply an analyst who specializes in issues related to legal claims. Such issues may include the legal claims of fraud and misrepresentation, dissipation of corporate assets, and many other accounting-related matters.

In fact, the *Black’s Law Dictionary* (Deluxe Tenth Edition, page 764), defines forensic accounting as “The application of accounting principles to monetary issues that arise in courts, as in the apportionment of funds and of financial responsibilities upon a divorce or dissolution of a partnership.”

There are generally accepted forensic accounting methods and procedures related to the measurement of economic damages within a commercial litigation environment. This discussion summarizes these damages measurement methods including lost profits, reasonable royalty rate, lost business value, cost to cure, and other damages measurement methods.

However, before the forensic accountant begins the quantitative damages measurement, he or she will:

1. collect relevant data and documents and
2. perform reasonable due diligence procedures.

This discussion focuses on the due diligence procedures that the forensic accountant performs before actually measuring the amount of economic damages in the commercial litigation matter.

Forensic accountants and other damages analysts (hereinafter “analysts”) are often asked to identify and quantify economic damages in commercial litigation matters. These commercial litigation matters could relate to either:

1. breach of contract disputes or
2. tort disputes.

In these matters, the analyst could be retained to support the litigation positions of an individual or of an industrial or commercial company as either the plaintiff or the defendant in the dispute.

The analyst is typically retained by—and supervised by—the legal counsel for either the plaintiff or the defendant in the industrial and commercial industry dispute. The legal counsel will work, directly with—and provide legal instructions and directions to—the analyst. This statement is true whether the analyst will provide consulting expert services or testifying expert services.

In commercial litigation matters, the economic damages often relate to an alleged wrongful act committed either by—or against—the subject industrial or commercial company.

The breach of a contract claim could relate to an alleged breach of an employment agreement, a consulting agreement, a joint venture agreement, a materials supply agreement, a services supply agreement, a permit, a nonsolicitation agreement, a noncompetition agreement, a nondisclosure agreement, a stock (or business assets) purchase or sale agreement, a license, a franchise agreement, or some other contract right.

The tort claim could relate to intellectual property infringement, a breach of fiduciary duty, an expropriation, the tortious interference with a business opportunity, or some other tort-related claim.

The breach of fiduciary duty claim could relate to a commercial lender’s responsibility to the company debtor, the company board (or company management) responsibility to its shareholders, accounting fraud and misrepresentation issues, a fraud against the market claim, a controlling shareholder (the company owner/operator) responsibility to a non-controlling shareholder, a trustee responsibility to the trust beneficiaries, the government’s responsibility in a condemnation or eminent domain action, and the like.

Of course, industrial and commercial companies (and their owner/operators) could be involved in many other types of litigation—other than breach of contract or tort claims. Common examples of other types of litigation include taxation disputes, antitrust claims, SEC violations, other regulatory violations, employment discrimination claims, family law matters, and others.

While such matters are all serious, these types of legal disputes are slightly different from the commercial litigation matters that are the subject of this discussion, at least with regard to the forensic accountant due diligence issues.

## ANALYST DUE DILIGENCE PROCEDURES

The due diligence procedures the forensic accountant performs in the commercial litigation damages measurement may be more difficult to perform than the due diligence procedures that another accountant may perform in a financial audit, a business valuation, a solvency analysis, or a merger and acquisition analysis. This is because the damages measurement is usually performed in a litigation or other contrarian environment.

This litigation environment adds at least two complications to the forensic analyst’s due diligence process.

First, there may be more documents for the analyst to review in a damages measurement analysis than in other types of financial analyses. These documents are principally litigation-related documents. Such documents include the litigation filings (e.g., the complaint, the answer, and any amendments to either), discovery documents (e.g., interrogatories and answers to interrogatories), and evidence documents (e.g., deposition transcripts and all of the documents produced in discovery).



Second, in the litigation environment, at least one party to the dispute is probably going to be less than fully cooperative with the analyst. The opposing litigant may produce only the specifically titled documents and data requested—and no more.

The analyst should not expect the opposing litigant to volunteer supplemental information, personal opinions, or data not prepared in the normal course of business. For purposes of this discussion, the opposing litigant is considered to be the party in opposition to the analyst's client.

Furthermore, in a litigation environment, the opposing litigant is not likely to suggest any damages theories or damages measurement methods to the analyst. In fact, the analyst should be suspect of any damages theories or damages measurement methods suggested by any party to the commercial litigation.

The analyst will typically perform reasonable due diligence procedures with regard to all documents and data obtained in the damages measurement analysis. To the extent that the analyst accepts certain data or documents without independent verification or documentation, that fact should be clearly disclosed in the analyst's expert report. To the extent that the analyst accepts a certain legal assumption or legal instruction, that fact should be clearly disclosed in the analyst's expert report.

First, this discussion considers the types of documents that the analyst may consider in the commercial litigation damages measurement analysis. Such documents may include the following:

1. Relevant legal claims documents
2. Relevant other legal documents
3. Relevant discovery documents

Second, this discussion considers the analyst's due diligence with regard to the legal claims, the causation or liability claims, and the damages claims.

Third, this discussion considers the analyst's due diligence procedures with regard to documents that may be considered to measure the following:

1. Lost profits
2. A reasonable royalty rate
3. Lost business value
4. Cost to cure



Fourth, this discussion considers the analyst's discussions with legal counsel with regard to the selection of—and application of—an economic damages measurement method.

Finally, this discussion considers the analyst's consideration of judicial precedent in the application of the economic damages measurement.

## ANALYST DUE DILIGENCE OF THE RELEVANT LEGAL CLAIMS

The analyst is not the party's legal counsel. And, the responsibility of the analyst is to measure the amount of economic damages, if any, suffered by the damaged party. It is not the responsibility of the analyst to give legal advice in any form. A consulting expert may be considered to be part of the legal team. However, if the analyst is going to serve as a testifying expert, he or she should be—and should act—independent of the legal team.

That said, the analyst should be generally familiar with the legal claims made by both parties in the commercial litigation dispute. That is, the analyst should be generally familiar with the following:

1. What business, business ownership interest, or other property is claimed to have been damaged
2. Who is alleged to have caused the damages—and why
3. Who is alleged to have liability for the damages—and why



4. How the subject business interest is alleged to have become damaged
5. When the subject business interest is alleged to become damaged
6. What is the legal claim regarding the alleged economic damages (e.g., a breach of contract, a lender liability breach of fiduciary duty, a shareholder oppression breach of fiduciary duty, an infringement, some other type of tort, etc.)

In other words, from reading the litigation documents and/or from discussing the litigation claims with the client's legal counsel, the analyst should have a basic understanding of (allegedly) who did what to whom and when—and why the resulting damages are compensable under the law.

The complaint (or similar legal filing) summarizes the claimant's allegations, including the following:

1. The alleged wrongful actions of the respondent
2. What laws were allegedly violated as a result of those wrongful actions
3. What the claimant wants the judicial finder of fact to order the respondent to do in order to make the claimant whole (e.g., to specifically perform the contract, to pay an amount of compensatory damages, an injunction of the defendant to cease causing the damages)

The answer (or similar legal filing) presents the respondent's side of the story, including the following:

1. What allegations the respondent admits to
2. What allegations the respondent denies
3. What counterclaims, if any, the respondent has against the claimant
4. What defenses the respondent raises to justify its actions—or to claim that its actions are not wrongful, or illegal, or the cause for any economic damages to the claimant
5. What the respondent wants the judicial finder of fact to do (e.g., to dismiss the case)

The legal counsel will typically instruct the analyst to assume that the defendant's actions were wrongful (i.e., illegal). It is not up to the analyst to make that legal determination.

The analyst can be instructed to assume a fact like: Alpha Supplier Company breached its contract to supply goods and services to Beta Builders Corporation. The analyst can then measure the

amount of economic damages suffered by Beta Builders as a result of the Alpha Suppliers alleged wrongful action—that is, Alpha Suppliers alleged breach of the supply contract.

Whether Alpha's actions were, in fact, a breach of the contract or were otherwise illegal is a legal conclusion. That determination is a causation or a liability issue, not a damages issue. The legal counsel for both sides in this dispute may argue that issue as a matter of law. Also, both sides in the dispute may present a causation or a liability expert to testify with regard to such issues.

But the analyst should focus on the measurement of the economic damages—and not on who violated the law. Ultimately, the judicial finder of fact in the matter will make that legal determination.

Until that legal determination is reached, the analyst may operate under a legal instruction to assume the following:

1. A breach of the supply contract occurred
2. The defendant's action (i.e., the alleged contract breach) was wrongful (illegal)

Accordingly, the analyst should be sufficiently informed regarding the allegations in the case in order to understand who is alleged to have done what to whom and when. That is, the analyst should understand what economic damages to what business interest he or she is being asked to measure.

## ANALYST DUE DILIGENCE OF THE RELEVANT LEGAL DOCUMENTS

The analyst should be aware of any discovery requests that may affect the economic damages measurement. Such discovery requests may include requests for admission, interrogatories, and similar requests. Legal counsel may ask the analyst to help draft these discovery requests. Or, legal counsel may at least ask the analyst to provide a list of financial and operational data—and other types of documents—that the analyst would like to have to perform the damages measurement.

Of course, the analyst cannot force the clients' counsel to provide him or her with copies of all discovery requests and associated responses. Sometimes, legal counsel may decide that it is not appropriate for the analyst to have access to certain documents produced in the discovery documents.

All the analyst can do is explain to the client's counsel:

1. what type of information would be helpful to the damages measurement process and

2. what the analyst would do with such information, if it is obtained.

The analyst will be particularly interested in any legal filings that may directly affect the analyst. An example of such a filing would be a motion to exclude the analyst from testifying at trial or to limit the analyst's expert testimony in certain areas.

The analyst will also be interested in the counsel's filing of any disclosure regarding the analyst's expert opinions. That is, the analyst will typically be interested in how the legal counsel describes his or her damages measurement opinions and the bases for those damages measurement opinions.

## ANALYST DUE DILIGENCE OF THE RELEVANT DISCOVERY DOCUMENTS

A lot of documents may be produced in the discovery phase of the commercial litigation. Legal counsel may not provide copies of all of these documents to the analyst. However, the analyst should have access to all discovery documents that affect the economic damages measurement.

In some situations, counsel may provide the analyst with password access to the counsel's cloud-based document server. That way, the analyst can sort through all of the discovery documents included in the counsel's database. With such access, the analyst can be relatively assured that he or she has access to all documents that may relate to the subject business interest economic damages.

Without that database access, the analyst may not know if the counsel is withholding documents that may have an undesirable impact on the economic damages measurement. Of course, even with password access to an automated data room, counsel can segregate discovery documents into the following categories:

1. Those documents that the analyst has access to
2. Those documents that the analyst does not have access to

Ultimately, the analyst may consider that incomplete, inconsistent, or obviously missing (e.g., based on gaps in the Bates numbers) documents may imply that legal counsel is not supplying all of the evidentiary documents related to the economic damages measurement. It is counsel's job to request evidentiary documents and to respond to document requests.

The analyst may help counsel to prepare such requests and to respond to such requests. However, the analyst has to decide if he or she has sufficient documents and data in order to perform the damages measurement analysis.

With regard to the subject business interest documents produced during the litigation discovery process, the analyst typically considers the following questions:

1. Are any of the documents obviously missing from within a series of documents? The series of documents could be periodic financial statements, project or research progress reports, production reports, sales reports, financial projections, etc.

A related question is: Are there any documents that are obviously just missing from the production (e.g., a copy of a relevant contract, license, permit, warranty, insurance policy, bond, trust indenture, loan covenant, shareholder agreement, etc.)?

2. Are any of the documents incomplete? Are pages of a document obviously missing? For example, the analyst can look for instances when a Xerox copy of a two-sided document only includes every other page. Are document exhibits or document appendixes obviously missing (in particular, are there memoranda or correspondence that refer to missing attachments)?
3. Are any of the produced documents contradictory? Do two (or more) different documents purport to be the same set of financial statements, financial projections, contracts, shareholder agreements, etc.? Do two (or more) different sets of correspondence (e.g., dated on the same or near dates) present two different descriptions regarding, say, the subject product or project?
4. Do any of the documents produced appear to be draft, incomplete, final, or revised versions of the purported document? Are the documents, or the associated transmittal correspondence, signed? Are the documents, or the associated transmittal correspondence, dated? Does any transmittal correspondence (or the documents itself) use terms like draft or final or revised or amended?
5. Were multiple documents produced in response to the same discovery request? Do the multiple documents present a consistent response or a contradictory response? Are the multiple documents needed to fully respond to the discovery request?

Or, is one document sufficient to respond to the discovery request (and all of the other documents are just superfluous or intended to obscure the essential document)?

6. Are the documents that were produced, in fact, responsive to the discovery request? Sometimes, the analyst (or the legal counsel) may request documents and data, and the analyst (or legal counsel) is disappointed in the response. The requested documents may simply not exist, or they may present data that are simply not useful to the analyst.

However, sometimes the documents produced simply do not respond to the stated discovery request. In fact, the document produced may simply represent subterfuge, produced to disguise the fact that the opposing litigant did not actually respond to the discovery request.

7. What are the effective dates of the documents and the data produced? For example, in litigation regarding a company valuation dispute, the analyst generally considers all information that was known or knowable as of the valuation date.

Subsequent (to the valuation date) information is typically only considered to the extent that such information confirms trends or projections that would have been known or knowable as of the company valuation date.

In contrast, in a the economic damages measurement, the analyst generally considers all information that is available up through a current (i.e., the analyst's expert report) date.

That is, the analyst may rely on the so-called "book of wisdom" to complete the damages measurement analysis. In a commercial litigation matter, the finder of fact wants to know what really happened. So the analyst can consider (a) information known as of the damages event date and (b) information that becomes available up to the date of the trial.

In the damages analysis, the analyst may perform the damages measurement as of either (a) the damages event date or (b) a current (i.e., analyst's expert report) date. In both cases, the damages estimate is brought forward (from the damages event date or from the current expert report date) up to the date of the trial—typically by the application of a prejudgment interest rate.

8. Were the documents that were produced prepared contemporaneously (i.e., a prelitigation filing) or prepared in response to the litigation discovery request? This question does not imply that documents prepared in response to discovery requests (or otherwise prepared after litigation is filed) are necessarily unreliable.

As explained previously, many industrial or commercial companies may not maintain separate financial or operational data regarding the particular asset, property, or business interest that was damaged. This is because there may be few (if any) financial accounting, taxation, or regulatory reasons for the company to assemble such business-interest-specific data.

Nonetheless, the analyst may be interested in whether the documents produced:

- a. were prepared historically and in the normal course of the company business operations or
  - b. were prepared recently and in specific response to the litigation discovery request.
9. Were the produced documents ever relied on by parties independent of the litigation (or were they prepared solely for the purpose of the litigation)? This question does not imply that all contemporaneously prepared documents are somehow not credible or not reliable.

However, the analyst may be particularly interested in documents that were relied on by parties (e.g., company executives, company stockholders, contract counterparties, auditors, taxing authorities, investors, joint venturers, bonding agencies, regulatory authorities, bankers, etc.) at the time that the documents were originally prepared.

This consideration may be particularly relevant for financial projections or other prospective financial information related to the asset, property, or business interest subject to the damages.

10. Were the documents ever reviewed by parties independent of the litigation (or were they prepared solely for the purposes of the litigation)? As mentioned above, the company may not prepare contemporaneous financial or operational documentation regarding the individual asset, property, or business interest that was damaged. This is because there is often no reason to prepare such documentation.



The analyst may be particularly interested in subject business interest documents that were historically reviewed by independent auditors or by other independent parties.

## THE BASIS FOR THE CAUSATION OR LIABILITY CLAIMS

The damages analyst is typically not also the causation analyst—or the liability analyst. In the damages measurement, the damages analyst will typically assume that there is causation, based on a legal instruction from the client's counsel.

Typically, the damages analyst will not also serve as the causation expert unless the causes of the damages are clearly within the expertise of the damages analyst. Such causation-related expertise may include, for example, fraudulent or misrepresented financial statements, improperly prepared income tax returns, or other causation factors to which the forensic accountant can claim expertise.

Typically, either a fact witness or another expert witness will testify as to the causation issues or liability issues at the trial. The causation expert may be an engineer, and industry specialist, or any other third-party specialist who can explain how the damages event occurred.

And, the causation expert should explain why the defendant's wrongful action would cause damages to the claimant. The liability expert, if different from the causation expert, should be able to explain why the defendant is legally responsible for the wrongful action.

The liability expert may (or may not) be an attorney.

Typically, the analyst working for the plaintiff's counsel relies on a series of legal instructions like the following:

1. The defendant performed a certain act (e.g., a tort or a breach of contract).
2. The defendant's act was wrongful (i.e., illegal).
3. The wrongful act caused the plaintiff to suffer damages.



It is then up to the damages analyst to:

1. select the appropriate damages measurement method and
2. measure the amount of economic damages suffered by the claimant (if any) as a result of the assumed wrongful act.

Typically, the damages analyst working for the defendant's counsel may receive a different set of instructions than the analyst working for plaintiff's counsel. That is, the defendant's analyst may be instructed by the defendant's counsel to assume the following:

1. The defendant did not perform the alleged act.
2. If the defendant did perform the alleged act, that act was not wrongful—that is, it was not illegal.
3. If the alleged act was illegal, the act did not cause the damages, if any, that were suffered by the plaintiff.

Alternatively, the defendant's analyst could be instructed by counsel to assume that the defendant did cause the plaintiff to suffer any economic damages. Then, it would be up to the analyst to measure the amount of the damages (if any) caused by the alleged wrongful actions.

In any event, the damages expert is typically not the causation expert. And, the damages analyst will typically not reach an expert opinion as to causation. Rather, the damages analyst will work



under a legal instruction regarding the assumption that there was (or was not) causation. That is, the analyst will measure the amount of the damages suffered by the claimant “assuming” the defendant wrongfully caused those damages.

While the damages expert is not the causation expert, the analyst should develop a basic understanding of the causation expert’s opinion. That is, the analyst can explain why (assuming the defendant’s wrongful action caused the damages) that action resulted in the claimant’s damages.

This way, the analyst can identify and measure economic damages that are consistent with the causation expert’s opinions. And, the analyst can avoid damages measurement methods that are inconsistent with the causation expert’s opinions.

## THE BASIS FOR THE DAMAGES CLAIMS

The analyst will not prepare the plaintiff’s complaint or the defendant’s answer in the commercial litigation. However, the analyst should be generally aware of each party’s respective claims in the complaint and the answer (including any amended complaints and amended answers).

This awareness is necessary in order for the analyst to develop a general understanding of each party’s claims in the commercial litigation. This way, the analyst can perform an economic damages measurement that is consistent with (and not contrary to) the legal claims of the client’s counsel.

Based on this general understanding of the legal claims in the commercial litigation, the analyst may prepare a damages measurement that is consistent with (and not contradictory to) the following:

1. The damages event described in the legal filings
2. The damages time periods (i.e., the first damages event through the last damages event) described in the legal filings
3. The business interest that was subject to damages as described in the legal filings
4. The type of the damages suffered, as described in the legal filings

With regard to this last point, for example, the analyst may decide not to measure damages based on a reasonable royalty rate if the legal filings described the damages event as resulting in either of the following:

1. Lost project revenue

2. Expenditures required to cure (i.e., recreation cost) the damaged project

In other words, the above description of the damages event would lead the analyst to apply a damages measurement method other than the reasonable royalty method.

## LOST PROFITS DOCUMENTS

Typically, the analyst will not select the damages measurement method until he or she:

1. assembles all relevant documents and
2. performs all reasonable due diligence procedures.

Nonetheless, in order to consider any of the lost profits measures of economic damages, the analyst will have to gather and review relevant data and documents. These data and documents can be obtained at the following points in the litigation:

1. During the litigation discovery process
2. During the analyst’s fieldwork and investigation
3. During the analyst’s industry, guideline company, or comparable transaction research

Since the analyst may not have selected the damages measurement method at this stage of the due diligence process, the analyst should be mindful of all generally accepted lost-profits-related damages measurement methods.

These lost-profits-related damages measurement methods typically include the following:

1. The projections/but-for method
2. The before and after method
3. The yardstick method

For each of these lost-profits-related measurement methods, the analyst will want to assemble and review both financial and operational data regarding the asset, property, or business interest subject to damages.

In fact, the analyst typically assembles and reviews documents and data related to three time periods:

1. Historical data (i.e., prior to the damages event date)
2. Current data (i.e., around the time of the damages event date)

3. Prospective data (i.e., prospective financial information after the time of the damages event date)

The analyst may review these data in order to ascertain whether the lost profits measurements are consistent with the following:

1. The damaged company historical results of operations
2. The damaged company production capacity constraints or other constraints
3. The damaged company's industry historical trends and projected outlook

In particular, the analyst may compare the company's historical financial projections to its historical results of operations. This comparison may help the analyst to assess whether the company has a track record of accurately projecting either of the following:

1. The business entity results of operations
2. The damaged asset, property, or business interest results of operations

Virtually all of the lost profits damages measurement methods involve some sort of "but for" analyses. That is, the analyst compares (1) the damaged company actual results of operations to (2) the damaged company hypothetical results of operations "but for" the wrongful action to the subject asset, property, or business interest.

Regardless of who the analyst is working for in the assignment, he or she will likely encounter one or more sets of but for financial projections. The but for financial projections may be prepared by the damaged company owner/operator.

Or, the but for financial projections may be prepared by another analyst working on the same matter. And, that other analyst could be a concurring analyst (i.e., working for the same client as the analyst) or an opposing analyst (i.e., working for a contrarian party in the dispute).

In any event, before relying on such financial projections, the analyst should subject the but for financial projections to reasonable due diligence procedures. These analyst due diligence procedures may include consideration of the following:

1. Whether the financial projection variables are internally consistent with each other
2. Whether the financial projections can be reconciled to historical results of operations
3. Whether the financial projections are mathematically correct (e.g., the projected balance sheet does balance)

4. Whether the financial projections can be reconciled with the appropriate industry trends
5. Whether the financial projections can be reconciled with a recognized independent benchmark
6. Whether the financial projections contemplate the correct dates related to the dispute (e.g., the damages date, the mitigation date, the end of damages date)
7. Whether the financial projections consider the plaintiff's mitigation efforts
8. Whether the financial projections consider the defendant's damages correction efforts
9. Whether the financial projections consider any maintenance expense or other required investment related to the damaged asset, property, or business interest
10. Whether the financial projections consider the expenses related to correcting the damaged asset, property, or business interest damages caused by the wrongful act

## REASONABLE ROYALTY RATE DOCUMENTS

As an alternative to estimating lost profits as a measure of the economic damages, the analyst could conclude a reasonable royalty rate. A reasonable royalty rate is more commonly concluded in, say, intellectual property infringement (and other tort) claims than in breach of contract claims. Nonetheless, a reasonable royalty rate could be one measure of damages related to any economic damages event.

The calculation of a reasonable royalty rate is based on the theory that the arm's-length negotiation of the parties could have avoided the litigation of the parties. Let's assume that the defendant wrongfully used (or otherwise damaged) the plaintiff company's intellectual property.

This estimation of the reasonable royalty rate assumes the defendant should have approached the plaintiff prior to the damages event. Hypothetically, the parties would have negotiated a fair, arm's-length license agreement for the use of the intellectual property.

Operating within this hypothetical license agreement, the defendant would have lawfully used the intellectual property. The defendant would have paid the plaintiff a fair license payment for this use license. So, the plaintiff would not have been damaged by the actions of the defendant.

In theory, in order to make the plaintiff whole after the damages event, the defendant should pay the plaintiff the arm's-length royalty that would have been agreed upon by the plaintiff in an arm's-length negotiation.

In such an analysis, the principal task of the analyst is to estimate this hypothetical arm's-length royalty rate. A description of the specific methods for estimating such a royalty rate (e.g., comparable uncontrolled transactions method, residual profit split method, comparable profit margin method, etc.) is beyond the scope of this discussion. However, the analyst typically performs reasonable due diligence procedures with regard to the assemblage of data used to conclude a reasonable royalty rate.

To estimate a reasonable royalty rate, the analyst typically gathers data from various sources, including the following:

1. The company owner/operator, such as historical financial statements and prospective financial statements
2. Guideline publicly traded companies, such as historical financial statements
3. The subject industry financial reporting services, such as industry average levels of profitability (which may be defined at various income levels)
4. Databases regarding intellectual property license agreements, such as online databases that report arm's-length royalty rates
5. The subject intellectual property, such as the historical development cost, a current replacement cost, or a current value estimate

When the analyst confirms that the data are objective and credible, all of these data sources can be used to extract a reasonable royalty rate. For example, the analyst could apply the profit split method to the company's historical or projected income measures in order to estimate a royalty rate. The profit split percentage is often based on the analyst's functional analysis of the intellectual property (vis-à-vis all of the company's other tangible and intangible assets).

Likewise, the analyst could estimate a royalty rate by comparing the company's profit margin to the guideline companies' profit margins. To the extent that the company earns an excess profit margin and that excess profit margin is attributable to the subject intellectual property, the analyst may assign some portion of that excess profit margin as a reasonable royalty rate.

The same type of excess profit margin analysis can be performed by comparing the company owner/operator profit margin to a published industry average profit margin. To the extent that the company owner/operator earns an excess profit margin and that excess margin is attributable to the subject intellectual property, the analyst may assign some portion of that excess profit margin as a reasonable royalty rate.

The analyst can search various databases to identify and select comparable uncontrolled transaction ("CUT") royalty rate evidence. Typically, the analyst will search for arm's-length license transactions involving similar intellectual property that are used in the same or similar industries.

After selecting a sample of CUT license agreements, the analyst may adjust the CUT data to make the transactional data more comparable to the subject intellectual property. The analyst selects the royalty rate appropriate to the intellectual property based on the adjusted CUT data.

In the CUT selection process, the analyst typically considers several factors regarding the subject intellectual property (compared to the CUT intellectual property), including the following:

1. Relative age
2. Relative size of the market/industry sector
3. Relative growth rate of the market/industry sector
4. Relative competitive position of the subject intellectual property and of the subject company

When extracting the intellectual property royalty rate from the selected/adjusted CUT license data, the analyst typically considers several factors regarding the subject intellectual property (compared to the CUT intellectual property), including the following:

1. Relative growth rates
2. Relative profit margins
3. Relative returns on investment

Alternatively, the analyst can also calculate a reasonable royalty rate by reference to some intellectual property value indication.

Using this method, first, the analyst starts with a current value estimate for the subject intellectual property. Typically, this value indication may be based on a cost approach valuation analysis (e.g., the replacement cost new less depreciation method). This is because if data were available to use the income approach or the market approach to

value the subject intellectual property, the analyst could use, for example, a profit split/residual profit method or CUT data to estimate the reasonable royalty rate.

Second, the analyst multiplies the subject intellectual property value by a fair rate of return of and on the intellectual property. This multiplication product indicates the amount of license income required to produce this rate of return. Third, the analyst divides the calculated license income by the amount of the company's revenue. This calculation produces an indication of a fair royalty rate (expressed as a percent of revenue).

The analyst may consider all of the above-indicated data and documents to conclude a fair royalty rate damages measurement in an intellectual property infringement damages analysis.

## COST TO CURE DOCUMENTS

As an alternative to estimating lost profits or a reasonable royalty rate, the analyst may calculate a cost to cure as an estimate of the subject asset, property, or business interest damages. The cost to cure often quantifies the loss in the subject asset, property, or business interest value due to the defendant's alleged wrongful action.

If the loss in the subject asset, property, or business interest value is the only type of damages suffered by the subject company, then the cost to cure may also be measured as the loss in business value for the company.

Finally, if the subject asset, property, or business interest was destroyed as a result of the defendant's wrongful act, then the cost to cure could be estimated as the cost to create a de novo (replacement) asset, property, or business interest.

This damages measurement method concludes the amount of expenditures required to restore the asset, property, or business interest to the condition it was in before the damages event occurred. Of course, this cost to cure the damages includes both direct costs and indirect costs related to restoring the asset, property, or business interest.

In addition, the cost to cure method typically includes an opportunity cost component. This opportunity cost generally relates to lost profits suffered by the company during the time period between the damages event and the final curing of the project, asset, or business interest.

In order to estimate the cost to cure, the analyst will typically review data and documents related to the following:

1. The original costs to create the asset, property, or business interest
2. The current costs to replace the asset, property, or business interest
3. The current costs to restore the asset, property, or business interest from its damaged condition to its pre-damaged condition
4. The impact of the damages event (e.g., lost revenue, customers, profits, consumer awareness, first to market industry position; increased expenditures related to maintenance, R&D, selling, and promotion; legal and other litigation-related expenses)
5. The opportunity cost during the time to cure the asset, property, or business interest (e.g., any lost economic benefits associated with any project, asset, or business interest diminished capacity)

## LOST BUSINESS VALUE DOCUMENTS

Essentially, the lost business value damages measurement method compares the difference in the damaged subject company value (1) before the damages event to (2) after the damages event. This damages measurement formula is typically presented as:

- Company business enterprise value before the damages event
- Company business enterprise value after the damages event
- = Lost business value due to the damages event

Typically the value of the damaged company is measured at a total business enterprise—or marketable, controlling ownership interest basis—level of value. At that level of value, typically, fair value is the same as fair market value. That is, shareholder-level value adjustments (such as a discount for lack of marketability or a discount for lack of control) do not apply to this damages measurement method.

Typically, the analyst can apply any generally accepted business valuation approaches and methods to this lost business value analysis. These generally accepted business valuation approaches and methods include the following:

- Income approach
  - Discounted cash flow method
  - Direct capitalization method



- Market approach
  - Guideline publicly traded company method
  - Guideline merged and acquired company method
  - Backsolve method
- Asset-based approach
  - Adjusted net asset value method
  - Asset accumulation method

In the due diligence process, the analyst will gather and review all of the documents and data that will be useful to value the subject company both before and after the damages event. These documents and data may include the following:

1. Historical financial statements
2. Historical income tax returns
3. Financial budgets, plans, and projections—prepared as of each valuation date
4. Historical financial budgets, plans, and projections—prepared as of each damages-related historical financial statement date
5. Operational budgets, plans, and projections—prepared as of each damages-related valuation date
6. List of all investment projects in progress—as of each damages-related valuation date
7. Corporate documents (e.g., articles of incorporation, bylaws)
8. Shareholder agreements
9. Banking covenants and outstanding debt interest rates and repayment schedules
10. Listing of key employees (particularly employees with employment contracts)
11. Listing of owned or leased real estate
12. Listing of owned or licensed intellectual property
13. Listing of any pending litigation claims
14. Listing of any pending client or customer proposals outstanding
15. Descriptions of any recent offers to buy the company

In particular, the analyst will focus on any documents or data that may be used to support the changes in any business valuation variables in (1) the “before” damages event valuation analysis compared to (2) the “after” damages event valuation analysis.

## DAMAGES MITIGATION DOCUMENTS

The analyst will typically consider the effects of the plaintiff’s mitigation efforts on the measurement of economic damages. When the plaintiff’s business interest is damaged due to the defendant’s alleged wrongful acts, the plaintiff still has the obligation to mitigate the effects of the damages. That is, the plaintiff has the obligation to perform reasonable efforts to minimize the amount of the damages suffered.

These mitigation efforts often involve the damaged party attempting to do the following:

1. Develop a new (replacement) asset, property, or business interest
2. Enter into replacement contracts, agreements, licenses, permits, franchises, relationships, etc.
3. Find new client/customers, suppliers, employees, etc.
4. Inform the public about (and, therefore, counteract) the wrongful actions with regard to the plaintiff’s patents, trademarks, copyrights, or related intellectual property
5. Enforce all other nondisclosure, noncompetition, nonsolicitation, and other available contractual remedies

Therefore, the analyst typically obtains data and documents related to any mitigation efforts related to the claimed economic damages, including the following:

1. Description of any efforts that the plaintiff made in mitigation
2. Timing of any efforts that the plaintiff made in mitigation
3. Expenditures that the plaintiff made in the mitigation efforts
4. Financial impact of the plaintiff’s mitigation efforts on reducing the amount of the economic damages
5. Date at which the economic damages were fully mitigated (or mitigated as much as it is possible to do)

The analyst typically considers any mitigation documents and data in the application of the lost profits, reasonable royalty, cost to cure, or lost business value damages measurements.

## ANALYST CONFERENCES WITH COUNSEL REGARDING DAMAGES MEASUREMENT METHODS

The analyst may perform due diligence by conferring with the client's legal counsel before selecting or implementing a damages measurement method. In some instances, damages measurement methods are allowed (or are not allowed) by statutory authority, judicial precedent, or administrative ruling.

As mentioned above, the damages analyst is not the client's counsel. That is, the analyst should receive legal directions and instructions from counsel regarding such matters.

The analyst is not responsible for researching the law or reaching legal conclusions regarding legally appropriate (or inappropriate) damages measurement methods. To the extent there is such statutory, judicial, or regulatory guidance regarding the measurement method, the client's counsel should provide legal instructions or directions to the analyst.

In such instances, it is the responsibility of counsel to provide legal instructions or directions to the analyst. It does not impair the analyst's independence to receive and rely on legal instructions or directions from the client's counsel. To the extent that counsel does not provide legal instructions or directions, the analyst should feel free to discuss the proposed damages measurement method with counsel.

If counsel does not object to the analyst's proposed damages measurement method as a legal matter, then the analyst may assume that there are no legal roadblocks to the proposed measurement method. To the extent that there is a legal concern about the proposed damages measurement methods, it is the responsibility of counsel to instruct the analyst regarding how to handle such a legal concern.

If the analyst's proposed damages measurement method is not permitted by statute or precedent, it is the responsibility of counsel to instruct the analyst to select another measurement method.

With regard to selecting the appropriate damages measurement method, it is not appropriate for counsel to otherwise substitute his or her professional judgment for that of the analyst. And, it is certainly not appropriate for counsel to recommend a damages measurement method just to allow the analyst to reach a greater or lesser damages conclusion.

However, it is perfectly reasonable for the analyst to confer with the client's counsel with regard to the

analyst's proposed damages measurement method. It is perfectly reasonable for counsel to instruct the analyst as to which damages measurement methods are allowable from a legal perspective. And, it is perfectly reasonable for counsel to instruct the analyst as to which damages measurement methods are not allowable from a legal perspective.

## ANALYST RELIANCE ON JUDICIAL PRECEDENT

Unless he or she is a licensed attorney and is acting in that role, the analyst should not perform (or rely on his or her own) legal research. To the extent that judicial precedent may inform the analyst with regard to a damages measurement method and related analytical decisions, counsel should do the following:

1. Research and select those relevant judicial decisions
2. Provide those relevant judicial decisions to the analyst
3. Explain those relevant judicial decisions to the analyst

To the extent that the analyst has any questions at all about the applications or implications of the judicial precedent to the subject damages measurement analysis, the analyst should confer with counsel.

The prosecution or defense of the commercial litigation is a team effort, involving several professional disciplines. Counsel should rely on the analyst for damages measurement expertise. Likewise, the analyst should rely on counsel for legal expertise.

Accordingly, counsel should provide the analyst with copies of (or summaries of) any relevant judicial decisions. The analyst should not assume that he or she has either the experience or the expertise to identify—or interpret—such relevant judicial precedent.

To the extent that counsel provides the analyst with judicial decisions, the analyst should review that precedent with counsel in order to obtain an understanding of the following:

1. The relevant legal concepts involved in the judicial decision
2. The allowable (or not allowable) damages measurement methods
3. The procedural adjustments allowed (or required) by the court for income taxes, prejudgment interest, mitigation efforts, time period over which damages may be considered, and other methodology considerations

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**“[T]he analyst should not attempt to extract specific damages measurement variables from . . . judicial decisions.”**

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In contrast, the analyst should not expect to extract quantitative damages measurement variables from judicial precedent. In other words, the analyst should not review the judicial decisions with the objective of extracting growth rates, discount rates, capitalization rates, income tax rates, royalty rates, profit split percentages, and so forth.

The analyst should not use judicial precedent as a source of damages measurement variables for the following reasons:

1. The facts and circumstances of each judicial decision are unique to that particular case.
2. Such damages measurement variables change over time, with corresponding changes in capital market and other economic conditions.
3. Each litigant company is different.
4. Each litigant company's industry is different.
5. The particular court in a particular judicial decision may have reached a poorly reasoned decision (which should not be duplicated).

Accordingly, the analyst may consider legal instructions and judicial precedent as a source of measurement methodology guidance. The analyst should not look to legal instructions or judicial precedent as the source of quantitative damages measurement variables.

## **SUMMARY AND CONCLUSION**

Industrial and commercial companies can become involved in commercial litigation disputes as either plaintiffs or defendants. In such disputes, the plaintiff often claims that it suffered economic damages as a result of the wrongful actions of the defendant.

Forensic accountants and other damages analysts are often retained in such disputes to measure the damages that the claimant suffered as a result of the wrongful actions of the respondent.

Analysts preparing such commercial litigation damages measurements have to perform reasonable due diligence procedures with respect to the documents and data they rely on.

With regard to the commercial litigation damages measurement, the analyst should perform due diligence procedures related to the following:

1. The relevant legal claims in the litigation
2. The relevant legal documents in the litigation
3. The relevant discovery documents in the litigation
4. The basis for the causation or liability claims
5. The basis for the economic damages claims

First, the analyst should have a basic understanding of the breach of contract, tort, or other claims in the subject litigation matter. That way, the analyst can assemble and assess the relevant legal claim documents, litigation discovery documents, subject company (and owner/operator) documents, and subject industry documents.

Second, the analyst should have a basic understanding of the alleged causation issues as well as the economic damages issues in the claim. That way, the analyst can collect and review data and documents that may be used in various damages measurement methods. These damages measurement methods may include lost profits, reasonable royalty rate, cost to restore, and lost business value damages measurements.

As part of the damages measurement analysis, the analyst also considers the relevant documents and data related to the plaintiff's mitigation efforts.

Finally, the analyst may confer with the client's counsel about the selection of the damages measurement method. Counsel may provide the analyst with a legal instruction and legal directions as to which damages measurement methods are legally permissible—and which damages measurement methods are not legally permissible—in the relevant jurisdiction.

During the commercial litigation process, counsel may also provide copies of relevant judicial precedent to the analyst. Such legal research is the counsel's responsibility. Because it is not within the scope of the analyst's experience, such legal research is not the analyst's responsibility.

The analyst may confer with the client's counsel related to any questions regarding the relevant judicial decisions. In any event, the analyst may review the judicial decisions in order to obtain judicial guidance on the acceptance (or lack thereof) of damages measurement methods. However, the analyst should not attempt to extract specific damages measurement variables from such judicial decisions.

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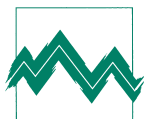
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404 • 475 • 2310 (fax)



## Best Practices Related to Deprivation-Related Property Valuations

*Valuation analysts (“analysts”) are often called on to measure economic damages in instances related to property deprivations. A property deprivation occurs whenever a property owner/operator is “deprived of” the ownership, operation, or economic enjoyment related to a property ownership interest. That property subject to the deprivation event could include tangible property or intangible property. For example, the tangible property subject to the deprivation event could include real estate and tangible personal property. The intangible property subject to the deprivation event could include a business ownership interest, an intangible asset or intellectual property, or a commercial contract right. The various types of property deprivation events could include a condemnation and eminent domain action, an international expropriation action, a tangible property or intangible property damages event, or intellectual property infringement, a dissenting shareholder appraisal rights or a shareholder oppression action, or a breach of a commercial contract. This discussion summarizes the many factors that analysts (and the tangible property or intangible property owner/operator and the legal counsel) should consider when measuring economic damages by reference to a deprivation event-related property valuation.*

*The original version of this discussion was published in the Spring 1992 issue of Insights. That original discussion was titled “Valuation Standards regarding Deprivation Appraisals.” Robert F. Reilly, CPA, was the author of the original discussion.*

### INTRODUCTION

This discussion considers the property valuation aspects—and economic damages measurement aspects—of what are commonly called deprivation event analyses. In particular, this discussion summarizes the theoretical concepts and the practical applications of so-called property deprivation analyses.

These deprivation-related concepts and applications affect the following:

- The purpose and the objective of the analysis
- The standards of value and the premises of value that may be applicable in the analysis
- The generally accepted property valuation approaches and methods that may be applied

- The reporting of the deprivation-related property valuation and/or damages analysis conclusions

Of course, with regard to property deprivation claims, the standard (or the definition) of value applied, the premise of value applied, the property valuation approaches and methods considered, the property valuation analysis procedures performed, and so forth, may all be influenced by the statutory authority, judicial precedent, and administrative rulings of the legal or political authority in which the property deprivation occurred.

With regard to economic damages deprivation claims, the same considerations are appropriate. That is, the definition of economic damages, the application of lost profits and other damages measurement methods, the use of ex-post versus

ex-ante damages analyses, the consideration of the post-damages event book of wisdom, the selection of the appropriate damages measurement date, the selection of damages measurement variables (e.g., pretax versus post-tax income considerations, present value discount rates, interest rates), and the like, may all be influenced by the relevant judicial precedent, administrative rulings, and statutory authority.

The applicable valuation fundamentals may also be influenced by the type of deprivation event that has occurred—and by the type of asset, property, or business interest that suffered the deprivation event. Nonetheless, there are certain valuation principles and valuation standards that are generally accepted across many types of property deprivation valuation analyses.

This discussion introduces many of these generally accepted property deprivation valuation principles and standards.

## THE NATURE OF A PROPERTY DEPRIVATION VALUATION ANALYSIS

A deprivation-related property valuation is often conducted when a deprivation event has occurred or when the property owner/operator is being threatened with a deprivation event. In such a deprivation event, the legal owner/operator of a property is “deprived of” the ownership of, the possession of, the use of, or the economic enjoyment of a particular tangible property, intangible property, business ownership interest, intellectual property, or intangible contract right.

Typically, in a deprivation event, the party subject to the deprivation (the property owner/operator) loses some portion (or all) of its bundle of legal rights related to the property. The party subject to the deprivation (the property owner/operator) may also lose some portion (or all) of the economic value related to that bundle of legal rights.

Typically, in a deprivation event, the party responsible for the deprivation event receives some portion (or all) of the total bundle of legal rights related to the subject tangible property or intangible property. And, the party responsible for the deprivation event receives some portion (or all) of the economic value related to that bundle of legal rights.

In short, in a deprivation-related action, the party subject to the deprivation event (normally

the property owner/operator) is economically disadvantaged. And, usually, the party responsible for the deprivation event is economically advantaged.

Typically, the ultimate objective of the deprivation-related property valuation is to quantify the amount of fair and just compensation to the property owner/operator to compensate that owner for the economic disadvantage associated with the deprivation event.

Most often, that amount of fair and just compensation is quantified to restore the property owner/operator to the level of—or the amount of—economic well being associated with the legal rights (including, but not limited to, property possession, dominion, and control) that the owner/operator enjoyed just prior to the deprivation event.

Some analysts may associate the term “property” in a deprivation context with the term “real estate” (e.g., land, land improvements, and buildings) and/or “real property” (e.g., legal interests in real estate, such as leases, development rights, mineral and natural resource exploitation rights, etc.).

However, with regard to a deprivation event analysis—and in a deprivation property valuation context—the term “property” should be much more broadly defined.

In addition to real estate, the term property includes tangible personal property, intangible assets and intellectual properties, contract rights, going-concern business entities, business ownership interests, and debt and equity securities. All of these types of “property” may be subject to a deprivation event.

## THE TYPES OF DEPRIVATION-EVENT-RELATED PROPERTY VALUATIONS

There are numerous types of—and circumstances related to—a property deprivation. To appropriately compensate the property owner/operator subject to the deprivation (and to exact the appropriate amount of compensation from the party responsible for the deprivation event), a deprivation-related property valuation may be performed.

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**“To appropriately compensate the property owner/operator subject to the deprivation . . . , a deprivation-related property valuation may be performed.”**

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When examined individually, each of these types of property valuation analyses is specific to a particular type of deprivation legal claim. However, when considered collectively, many of these types of property valuation analyses share common practical and conceptual issues across different types of deprivation legal claims:

- Condemnation and eminent domain
- Tangible and intangible property damages
- Intellectual property infringement
- Squeeze-out transactions and shareholder oppression items
- Breach of commercial contract

The above list presents five disparate types of legal claims. However, from a damages measurement perspective, there are some common threads that run through these different legal issues.

In all cases, one party has been damaged as the result of the actions of another party. In all cases, the first party suffers the deprivation of certain property rights. Those property rights could include real property ownership, tangible personal property ownership, intangible personal property ownership, business interest ownership, or contract rights (and related reasonable expectations) ownership.

And, another common thread is that one way (out of many ways) to measure the amount of damages suffered by the deprived party is to estimate the value of the property rights that are being deprived.

In the category of the condemnation and eminent domain deprivation, analysts may include all instances of municipal or government agency/authority condemnation, the nationalization of a private owner's property and industry, and the local, national, or international expropriation of any type of property.

In these instances, a national government, state government, municipality, other governmental agency with condemning authority, or a private entity with condemning authority, may assert dominion over private property. The condemnation or eminent domain action is typically justified because it is initiated on account of a public exigency and in the public good.

In such instances, the condemning authority (public or private) performing the deprivation has an obligation to provide adequate compensation to the private owner/operator of the realty, personalty, business, or contract rights subject to the taking.

In the category of the property damages deprivation, analysts may include tangible property damages and intangible property damages. Tangible property damages may include fire, theft, and other actual or constructive larceny. An example of such tangible property damages would be the felonious arson and malicious burning of a factory, warehouse, or other commercial real estate. Examples of intangible property damages may include slander, libel, and other forms of damage to a party's name, reputation, and goodwill.

For example, the party damaged by an actionable defamation may include an individual, a professional practice, or a commercial business entity. Another example of an intangible property damages event may be a tortious interference with the claimant's business opportunity.

In the category of the intellectual property infringement-related deprivation, analysts may include patent, trademark, copyright and other intellectual property infringement actions.

Prior to the infringement, the legal owner/operator of the intellectual property enjoyed special legal rights and legal protections—and the associated economic benefits of such special protections. As the result of an unauthorized use or other infringement, the infringing party deprived the intellectual property owner/operator of the full rights and economic benefits of the subject intellectual property.

In the category of the squeeze-out transaction or the shareholder oppression deprivation, the deprived party previously owned a common or a preferred equity ownership interest, partnership interest, or other ownership interest in a business entity. And, that equity interest owner enjoyed a certain level of legal rights and a certain amount of economic satisfaction associated with that ownership interest.

As a result of the squeeze-out transaction, freeze-out procedure, or shareholder oppression action, the stockholder/partner is involuntarily deprived of his/her investment property and of his/her legal rights and the associated economic satisfaction.

In the category of the breach of commercial contract deprivation, the deprived party entered into a contract—and paid valuable consideration—in reasonable expectation of the enjoyment of certain contract-related legal rights and certain economic benefits. The subject commercial contract may call for the purchase or the sale of an asset, for the consumption or provision of goods and services, and the like.

The point is that the claimant expected to enjoy the economic benefits associated with specified contract rights. As the result of the wrongful action of the contract counterparty, the claimant is deprived of the value of those contract rights.

Prior to the contract breach, the party suffering the deprivation event enjoyed a quantifiable level of economic satisfaction. As a result of the breach, that party was involuntarily deprived of that level of economic satisfaction.

Typically, in this case, the objective of the deprivation valuation analysis is to quantify the amount of compensatory value required to restore the aggrieved claimant to that party's predeprivation level of economic satisfaction.

## APPROPRIATE DEPRIVATION EVENT ANALYSIS STANDARDS OF VALUE

Valuation analysts—and the deprived party's litigation counsel—understand that there are numerous alternative standards (or definitions) of value that can be estimated for the same asset, property, or business ownership interest. Some of the alternative standards of value include the following:

- Fair value
- Fair market value
- Investment value
- Acquisition value
- Strategic value
- Owner value
- Use value
- User value
- Many others

Essentially, each of these alternative standards of value answer the same question: Value to whom? Of course, the identification of that "whom" is slightly different in each standard of value. Various alternative standards of value may be applicable in the case of a property deprivation valuation analysis.

Summary descriptions of some of the more common standards of value are presented below. These summary definitions are presented for purposes of this discussion. And, the following definitions are not intended to comply with any particular set of valuation professional standards:

- Fair market value—The price that the hypothetical typical (or average) willing

buyer will pay to the hypothetical typical (or average) willing seller for a property. In this common definition of value, the buyers and sellers are both hypothetical and unspecified.

- Market value—The price agreed to for the subject property by the same hypothetical willing buyer and hypothetical willing seller concept in the "fair market value" standard of value with a few additional conditions placed upon the arm's-length transaction (e.g., that value will be stated in a cash equivalency price and in local currency.)
- Acquisition value—The price for the subject property that would be paid by a specific, identified buyer (or business acquirer).
- Use value—The price that the subject property would receive in a specific and specified use (which may be different from the subject property's current use).
- Investment (or investor) value—The price that a buyer would pay for the subject property by reference to that buyer's required rate of return to an investment (without consideration to the price that the property owner would sell the property for).
- Owner value—The price that the current property owner would pay (to buy the property itself) in its current use (which may be substantially different from what the property may be worth to any other particular buyer, to any other user, or to the marketplace in general).
- Insurable value—The price required (in terms of current cost) to replace the subject property.
- Collateral value—The price that a secured creditor would expect to receive in a sale of the property after a foreclosure of a security interest related to a secured loan on the property.

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**"[T]he objective of the deprivation valuation analysis is to quantify the amount of compensatory value required to restore the aggrieved claimant to that party's predeprivation level of economic satisfaction."**

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- **Ad valorem value**—The price of the property indicated by the application of a statutory valuation formula used by a taxing jurisdiction.
- **Contributory value**—The contribution of the subject property to the total value of an identified bundle (or unit) of properties
- **Fair Value**—The price of the property that results in an equally fair and equitable result to both the buyer and the seller; a price at which neither the buyer nor the seller is advantaged or disadvantaged; in a business ownership interest deprivation matter, the pro rata value of the total business enterprise without the application of any valuation discounts or adjustments for relative lack of ownership control and relative lack of security marketability

In U.S. generally accepted accounting principles (“GAAP”) accounting, there is also a measurement of asset and liability value called “fair value.”

This property deprivation discussion does not consider that GAAP-related fair value measurement standard of value.

The above list includes several common alternative standards of value. This list is not intended to be exhaustive. None of these alternative standards of value are implied to be “better” than any other standard of value.

Virtually all of these alternative standards of value could be estimated for the very same asset, property, or business ownership interest. And, the result of such an analysis would be different (and possibly quite different) “values” for the very same asset, property, or business interest.

In the case of deprivation-event-related property valuations, some statutory authority or judicial precedent may require the estimation of the fair market value standard of value. However, with regard to dissenting shareholder appraisal rights matters and shareholder oppression claims, many jurisdictions apply the fair value standard of value.

While the relevant statutory authority and judicial precedent controls the standard of value that the valuation analyst will follow, fair value is often considered to result in a fair and equitable treatment of the property owner in the case of an involuntary transaction, taking, or conversion of the subject property.

There are jurisdiction-specified statutory definitions of fair value that apply in shareholder rights

litigation matters. In these types of litigation matters, a corporation (or its board of directors) has primary duties to the company shareholders. In addition, the corporation controlling shareholder has fiduciary duties to the corporation noncontrolling shareholders.

In these statutory fair value litigation matters, there are a number of basic tenets that are common to the concept of fair value (at least in terms of how they affect the deprivation valuation analysis).

First, a willing buyer/willing seller transaction is not necessarily contemplated. This is because, most deprivation events do not involve a “wiling” seller. Generally, the party subject to the deprivation had no intention to—and does not currently want to—sell his/her property. The property deprivation is typically involuntary. And, other than the party responsible for the property deprivation event, there may not be a willing buyer for the subject property.

Second, the objective of the deprivation valuation analysis typically is not to estimate the likely activity of a hypothetical marketplace. The objective of this deprivation event analysis is to restore the property owner to his/her economic status before the deprivation event occurred.

As the word “fair” implies, fair value quantifies the (fair and) just compensation to the property owner who was involuntarily deprived of the economic enjoyment of the subject property.

There is another standard of value that is not as widely used in judicial decisions or in the professional valuation literature. However, this alternative standard of value may be appropriately descriptive of the purpose and objective of deprivation valuation analysis: compensatory value.

In many respects, the compensatory value standard is analogous to the fair value standard. However, the term “compensatory value” is more expository of (1) the particular purpose of the deprivation-related valuation analysis and (2) the answer of the common standard of value question: Value to whom?

Compensatory value is the value of the subject property to the property owner, where that current owner is the party subject to the taking, the expropriation, the economic damage event, or some other involuntary conversion. And, the general interpretation of compensatory value is: The value that will result in a fair and reasonable amount of compensation for the deprived property and that will restore the property owner to the level of economic satisfaction enjoyed just prior to the deprivation event.

Although it is not commonly cited in professional valuation textbooks, such a standard of value is an intuitively and intellectually appealing measurement of the compensation in a property deprivation valuation analysis.

## APPROPRIATE DEPRIVATION ANALYSIS PREMISES OF VALUE

In a property deprivation valuation analysis, the valuation analyst typically does not have to decide the appropriate standard of value, description of property subject to the deprivation event/valuation analysis, or deprivation event/valuation date. These valuation analysis fundamentals are often decided by the client's legal counsel and are documented in a written engagement letter.

However, for many types of valuation analyses, one of the first valuation analysis fundamentals that the analyst will decide is: What is the appropriate premise of value to apply to the subject property? There are at least four alternative premises of value that may be appropriate to a deprivation-event-related property valuation analysis.

The valuation of virtually any type of asset, property, or business ownership interest can be estimated based on each of these alternative premises of value:

- Value in continued use, as part of a mass assemblage of assets, operating as part of a going-concern business enterprise
- Value in place, as part of a mass assemblage of assets, but not operating in current use as part of a going-concern business enterprise
- Value in exchange, on piecemeal basis (and not part of a mass assemblage of assets), where the exchange is part of an orderly disposition of assets
- Value in exchange, on a piecemeal basis (and not part of a mass assemblage of assets), where the exchange is part of an involuntary disposition (also called a forced liquidation)

Virtually any type of property subject to a deprivation event can be valued based on each of these four alternative fundamental premises. Of course, the value conclusion based on each alternative premise of value, for the same property, may be materially different.

The valuation analyst will often select the appropriate premise of value for the subject property based on the following:

1. The purpose and the objective of the valuation assignment
2. The actual physical and functional status of the subject property
3. The analyst's highest and best use ("HABU") conclusion with regard to the subject property

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**"It is possible . . . that the act of the deprivation event itself could change the functional or economic status of the subject property."**

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In the case of a deprivation-related property valuation, it is generally accepted that the valuation analyst should apply the premise of value that would have been appropriate on the day before the deprivation event occurred. For example, if the property was (or was part of) a going-concern business enterprise just prior to the deprivation event, then it should be valued based on the premise of value in continued use.

It is possible (and, often, likely) that the act of the deprivation event itself could change the functional or economic status of the subject property.

To illustrate this point, let's assume that a hotel property was operating as a going-concern business enterprise just prior to an eminent domain condemnation action. At the moment after the condemnation event, the hotel property ceased its hospitality-related going-concern business operations.

In this example, the subject hotel property should still be valued based on the premise of value in continued use (as part of a going-concern business enterprise). This premise of value would be appropriate in this analysis because that was the functional status of the subject hotel property just prior to the deprivation event.

To value this hypothetical hotel property based on any other premise of value would economically disadvantage the property owner in this example. To value the subject property based on any other premise or value could also economically advantage the condemning authority in this example.

This result would occur because the condemning authority could (theoretically) restore the subject hotel to its operational status before the deprivation event and then enjoy the value increment in the hotel—without having paid the property owner for that value increment.

In a deprivation-event-related property valuation analysis, applying a premise of value other than a premise that was appropriate just prior to the



deprivation event may not achieve a fair value (meaning equitable to the property owner) or a compensatory value (meaning the measurement of the just compensation to the property owner).

## SPECIAL VALUATION FACTORS TO CONSIDER IN A DEPRIVATION-RELATED PROPERTY VALUATION

As implied above, there are a number of special considerations that the analyst should be mindful of when preparing a deprivation-related property valuation. Of course, numerous judicial decisions have described different factors, based on the specifics of each individual case before each finder of fact.

Various statutes also specify (or imply) lists of special valuation factors to consider, based upon the type of deprivation event that has occurred. And, various academic and practitioner analysts have postulated special valuation factors to consider, based upon the type of property subject to the deprivation analysis.

The following discussion represents a consensus of valuation factors that should typically be considered by analysts in deprivation-related property valuations. These valuation factors are general in nature so as to apply to the valuation of various types of subject properties and to various types of deprivation event situations.

First, in the property valuation analysis, the analyst should ignore the deprivation event itself, and all of the effects of the deprivation event on the subject property. In other words, the subject property should be valued as if the deprivation event (and any resulting decrement in the subject property value) had not occurred.

This hypothetical condition (that the deprivation event itself has not occurred) may be the basis upon which the analyst can make a comparative analysis for purposes of quantifying one measure of compensatory value—that is, the fair value of the subject property before the deprivation event less the fair value of the subject property after the deprivation event.

Second, the analyst should ignore all subsequent events after the occurrence of the deprivation event (i.e., after the deprivation event valuation date). Reliance only on information that is known or knowable is a generally accepted procedure in a property valuation analysis.

Of course, the analyst may also be asked to quantify the property owner's economic damages in addition to the subject property valuation. In an economic damages analysis, reliance on the book of wisdom (i.e., all events subsequent to the valuation date and up to the damages report date) is a generally accepted damages measurement procedure.

In the case of deprivation-event-related property valuations, it is often difficult (but necessary) for the analyst to ignore the substantial economic effects of time and the deprivation event itself on the subject property.

Third, the analyst should ignore the deprivation event itself (and the associated effects of the deprivation event) during the selection of the appropriate premise of value. Generally, the selection of the appropriate premise of value is a threshold test. If the subject property was operating as a going-concern business prior to the deprivation event, then it should be valued based on the premise of value in continued use.

For example, if our illustrative hotel was open for business prior to the deprivation event, then it should be valued based on a value in continued use premise. This premise of value would be appropriate even if the deprivation event has affected the hotel business operations.

For example, the deprivation event may have caused the subject hotel to experience lower occupancy and less profits than it enjoyed historically, compared to industry benchmarks. After the deprivation event, the subject hotel may still be a going-concern business (although it may have a decreased value as a going-concern business compared to its historical value).

Fourth, the analyst should ignore the actions of the party responsible for the deprivation event, both before and after the actual deprivation event. In the

case of a condemnation or eminent domain action, for example, the state may have performed certain actions prior to the issuance of the actual condemnation notice that would have a decremental effect on the value of the subject property.

Using our hypothetical hotel to illustrate this point, such state actions may include closing down most access roads to the subject hotel, changing the zoning of the subject property, starting major highway construction directly adjacent to the subject hotel, and the like. However, the analyst should factor out all of these deprivation-event-related effects from the deprivation-related property valuation.

In other words, the analyst should value the subject property on the date before any detrimental deprivation-event-related activities occurred.

Fifth, the analyst will typically not consider many of the valuation discounts (or other valuation adjustments) that may normally apply in a willing buyer/willing seller market-value-based valuation.

To illustrate, let's assume that our illustrative hotel is a private corporation, with a number of shareholders. Let's also assume that the hotel is subject to a condemnation action deprivation event and that one of the four equal shareholder/property owners is seeking compensation for the deprivation event.

Normally, the analyst may discount the total business enterprise value of the private corporation property owner due to its illiquidity. Normally, the valuation analysts may also discount the owner's pro rata equity value of the closely held corporation due to the lack of marketability of securities in private corporations.

Normally, the analyst may discount the owner's pro rata value due to the noncontrolling ownership nature of the subject equity interest (i.e., related to its lack of control of the subject hotel operations). And, normally, the analyst may discount the owner's pro rata equity value due to any other restrictions on the transferability of the private company shares (e.g., for buy/sell agreements, etc.).

However, in a deprivation-related valuation analysis, none of these stock valuation discounts would typically apply to our hotel shareholder. These stock valuation discounts may apply in valuing the hotel business ownership interest under a willing buyer/willing seller definition—but our hotel shareholder is not a willing seller.

The hotel shareholder was perfectly content to own his/her 25 percent of the privately owned hotel. He/she had no intention of selling the ownership interest. Instead, the shareholder was involuntarily

deprived of the value of the business ownership interest.

If these valuation discounts were applied in the deprivation valuation, then the four hotel company owners would collectively receive much less than the total market value of the subject hotel. Accordingly, the four owners would be economically disadvantaged. And, the state (i.e., the condemning party responsible for the deprivation event) would be economically advantaged. This is because state condemning agency would be able to “buy” the subject hotel for much less than its total market value.

## SUMMARY AND CONCLUSION

In a deprivation event, a property owner/operator is being “deprived of” the ownership, operation, use, or economic benefit of a type of property. That type of property could include real estate, tangible personal property, intangible assets and intellectual property, business ownership interests, or contract rights.

A property deprivation action is typically a legal event. Accordingly, the analyst may seek legal instructions from the client's counsel with regard to the statutory authority, administrative rulings, and judicial precedent that may be applicable to the deprivation-related valuation analysis or damages analysis.

One measure of damages related to the deprivation event is to estimate the value (or value diminution) related to the deprived property.

Before performing a deprivation-event-related property valuation, the analyst should understand the purpose and objective of the valuation (within the property deprivation context), the nature of the deprivation action, and the type of property subject to the deprivation event.

The analyst should consider the appropriate standard of value and the appropriate premise of value in order to conclude the compensatory value of the subject property. The appropriate standard of value (and the appropriate property valuation approaches and methods) may be different than those that would be applicable in the typical hypothetical willing buyer/hypothetical willing seller concept.

Since the deprivation-event-related property valuation relates to an involuntary transaction, the analyst should conclude an economic value that represents a fair and just measure of compensation for the damage suffered by the property owner/operator that experienced the deprivation event.



# Practical Procedures in the Use of Event Studies to Measure Economic Damages

*In commercial litigation matters, damages analysts (“analysts”) are often asked to identify the event that caused the claimants’ economic damages. The analysts are then asked to measure the amount of damages suffered by the claimants as a result of the wrongful event caused by the defendants. In litigation claims related to fraud against the marketplace or accounting fraud and misrepresentation, analysts often perform event studies to identify the damages event. In addition, analysts often use event studies in dissenting shareholder appraisal rights litigation claims. In cases involving the merger or acquisition of a public corporation, analysts may use an event study to test whether the efficient market hypothesis applies with regard to the subject public company’s stock price movements. This test is applied in order to determine whether the public company’s pre-announcement stock price is an appropriate starting point from which to estimate the fair value of the acquired company’s stock. In any event, this discussion summarizes the practical procedures that analysts should know when they use event tests to measure economic damages.*

*The original version of this discussion was published in the Autumn 1999 issue of Insights under the title “The Use of Event Studies to Quantify Economic Damages.” Scott D. Levine, CPA, and Robert F. Reilly, CPA, were the authors of the original discussion.*

## INTRODUCTION

Economic event studies may be used by damages analysts (“analysts”) to identify a damages event. Event studies may also be used by analysts to measure economic damages, particularly with regard to certain types of damages events. And, event studies may be used by analysts to prove a hypothesis or an assumption applied in a particular application of the efficient market hypothesis with regard to the stock trading price of a publicly traded company.

This efficient market hypothesis issue may be relevant in a dissenting shareholder appraisal rights analysis with regard to the acquisition (or going-private transaction) of a public company. One question in that fair value analysis may relate to whether the public company’s stock price efficiently reflected all known information regarding that public company.

In other words, is the public company’s public stock price a reasonable starting point from which to estimate the fair value of the public company stock? An event study may be used to test the application of the efficient market hypothesis with regard to the public company’s stock price movements.

In addition to dissenting shareholder appraisal rights matters, event studies may also be used in fraud against the marketplace analyses. And, event studies may also be applied in related accounting fraud and misrepresentation litigation claims.

In any event, this discussion summarizes some of the best practices (and practical procedures) related to the analyst’s use of event studies to either (1) identify the damages event or (2) measure the amount of damages suffered by the damaged party—as a result of the wrongful actions of the damaging party.

Event studies are typically used to measure the relationship between:

1. an identified economic “event” that affects a security (or a company) and
2. the investment rate of return on that security (or on that company).

Some types of economic events, such as a change in federal income tax rates or a change in a macroeconomic (e.g., monetary policy) variable, affect many securities contemporaneously. Other types of economic events, such as a change in the subject company management or the announcement that the subject company is a defendant in major litigation, are specific to an individual security.

## EVENT STUDIES

Event studies are sometimes used by damages analysts to test the application of the efficient market hypothesis. For example, the following occurrences would tend to contradict the robustness of the efficient market hypothesis with regard to a particular subject:

1. An abnormal rate of return that continues after the subject economic event
2. An abnormal rate of return that is associated with an anticipated economic event

A classic application of an event study was published in 1969 by professors Fama, Fisher, Jensen, and Roll. The application of the study was presented in an article entitled “The Adjustment of Stock Prices to New Information.” That article was published in February 1969 in the *International Economic Review* (volume 10, number 10, pages 1 to 21).

In that journal article, Fama, Fisher, Jensen, and Roll examined the impact of common stock splits on publicly traded security prices. These academics proved that abnormal rates of return dissipated rapidly following the announcement of stock splits, thereby proving the rigor of the efficient market hypothesis.

In addition to their use in confirming the application of the efficient market hypothesis, event studies are commonly used in the damages analysis and measurement of the economic impact (i.e., on a publicly traded security price or a public company value) of a particular defined event.

That is, event studies are often used by analysts to quantify the effect on a particular security’s value (or on a particular public company’s value) due to such economic “events” as the following:

- A breach of contract
- An announced merger or acquisition
- A failed merger or acquisition
- A lawsuit filing or an announced taxation dispute
- A settled lawsuit or a settled taxation dispute
- The announcement of a new contract or product
- The award of a patent or a franchise
- The disclosure of increased or decreased earnings

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**“Event studies are sometimes used by damages analysts to test the application of the efficient market hypothesis.”**

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In addition event studies may be used to quantify the effect on a particular security’s value due to the failure to appropriately disclose any of these economic “events.”

## ANALYTICAL PROCEDURES IN THE DEVELOPMENT OF AN EVENT STUDY

The following analytical procedures are commonly applied in any of the generally accepted methods for conducting an event study related to a company-specific economic “event.”

1. Define the specific economic event and identify the timing of that economic event. The timing of the specific “event” is not necessarily the time period during which the event actually occurred. Rather, the relevant time period is often the typical investment holding period immediately preceding the announcement of the specific economic event.
2. Array the subject public security rate of return data relative to the timing of the subject economic event. If the subject event is disclosed to the public on a particular day with time remaining for the stock market to react, then the

day of the disclosure is considered to be time period “zero.” Then, the measurement periods both preceding and following the subject event are selected.

For example, let’s assume that the 90 trading days immediately preceding the subject event and the 10 days immediately following the subject event are selected as the pre- and post-event time period.

In this example, the pre-event trading days would typically be designated as  $t - 90$ ,  $t - 89$ ,  $t - 88$ , . . .  $t - 1$ .

The event day itself would be designated as  $t = 0$ . And, the post-event observation trading days would be designed as  $t + 1$ ,  $t + 2$ ,  $t + 3$ , . . .  $t + 10$ .

Because the subject event is specific to each subject company, the observation time period should also be specific to each individual event.

3. Separate the company-specific component of the rate of return from the public security’s total return for the pre-event period. To achieve this total return disaggregation analysis, one common procedure is to use the typical “market model” to isolate the company-specific rates of return. For example, the subject security’s daily returns during the pre-event measurement period from  $t - 90$  through  $t - 1$  may be regressed against the total market’s returns during the same 90-day observation time period.

The company-specific returns are typically defined as the difference between:

- a. the subject security’s daily returns and
- b. the daily returns predicted from the regression analysis equation.

In this regression analysis, the predicted daily returns are the subject security’s alpha component plus its beta coefficient times the overall stock market’s daily return.

This regression-based daily return estimation procedure may be described as follows:

$$A_{i,t} = R_{i,t} - \hat{\alpha}_i - \beta_i(R_{m,t})$$

where:

- $A_{i,t}$  = the company-specific return of security  $i$  in time period  $t$
- $R_{i,t}$  = the total return of security  $i$  in time period  $t$

- $\hat{\alpha}_i$  = the alpha component of security  $i$ , estimated from the pre-event measurement period
- $\beta_i$  = the beta coefficient of security  $i$ , estimated from the pre-event measurement period
- $R_{m,t}$  = the total rate of return of the overall stock market in time period  $t$

4. Estimate the standard deviation of the daily company-specific returns during the pre-event measurement time period (e.g., from time period  $t - 90$  through  $t - 1$ ).

This standard deviation of daily returns calculation procedure may be described as follows:

$$\alpha_i = \sqrt{\frac{\sum_{t=-90}^{-1} (A_{i,t} - \bar{A}_i)^2}{n-1}}$$

where:

- $\hat{\alpha}_i$  = the standard deviation of the company-specific returns of security  $i$ , estimated from the pre-event measurement period
- $\bar{A}_i$  = the average of the company-specific returns of security  $i$ , estimated from the pre-event measurement period
- $n$  = the number of days in the pre-event measurement period

5. Quantify the company-specific return during (a) the specific event date and (b) the post-event time periods.

To estimate the company-specific rate of return for each day during these time periods, subtract from each security’s total return for each day:

- a. the subject security’s alpha component and beta coefficient times
- b. the overall stock market’s rate of return on that day.

For purposes of this comparison, the subject security’s alpha and beta variables are the same as those variables estimated from the pre-event regression analysis. The procedure for estimating these rates of return is the same procedure described in paragraph (3) above.

The time subscript  $t$ , however, typically ranges from 0 to +10—rather than from -90 to -1.

6. Aggregate (a) the company-specific rates of return and the (b) standard deviations across the sample of securities; perform this aggregation on (a) the “event” day and (b) the post-event days.

That is, first, calculate the sum of the company-specific rates of return for each day and, second, divide this sum total amount by the number of securities in the sample.

This aggregation calculation procedure is illustrated below:

$$A_t = \frac{\sum_{i=1}^N A_{i,t}}{N}$$

where:

$A_i$  = the average of the company-specific returns for all securities in the sample in time period  $t$

$N$  = the total number of securities in the sample

The standard deviations are then aggregated by squaring the standard deviation of each security’s specific rate of return estimated during the pre-event time period.

This calculation procedure is performed by following these steps:

- a. Sum all the standard deviation values across all of the securities
- b. Quantify the square root of this sum total
- c. Divide this sum total by the number of securities in the sample

The following equation illustrates this standard deviation aggregation procedure:

$$\sigma_N = \sqrt{\frac{\sum_{i=1}^N \sigma_i^2}{N}}$$

7. Test the hypothesis that the company-specific returns (a) on the event day and (b) on the post-event days differ significantly from zero.

The  $t$  statistic is typically calculated as the test of statistical significance. The  $t$  statistic is computed by dividing:

- a. the average of the company-specific rates of return across all securities each day

- b. by the aggregation of the standard deviations across all securities.

The calculation for the aggregation of standard deviations was described in the previous procedure.

Next, depending on the number of degrees of freedom, determine whether the subject economic “event” significantly affects the company-specific rates of return. This procedure to measure statistical significance is quantified as follows:

$$t \text{ statistic} = \frac{A_t}{\sigma_N}$$

If the subject economic event is unanticipated and if the  $t$  statistic is both statistically significant on the day of the event and statistically insignificant on the days following the subject event, then the analyst can reasonably conclude the following: the subject economic “event”

- a. does affect the subject publicly traded security (or public company) returns but
- b. does not contradict the efficient market hypothesis.

On the other hands, if the  $t$  statistic continues to be statistically significant on the post-event days, then the analyst may conclude the following:

The market is inefficient—in that it does not quickly absorb such new information.

The analyst may also reasonably conclude that the market is inefficient if:

- a. the analyst were to observe significant  $t$  statistics on the day of the subject event and
- b. the analyst had reason to believe that the subject event (including its magnitude) was anticipated.

## ISSUES IN THE MEASUREMENT OF SPECIFIC ECONOMIC “EVENTS”

When designing an event study, the quantitative measurement of the subject economic event is not always obvious. For example, let’s assume that the subject event is the public announcement of the company’s annual earnings. The public announcement that the company’s annual earnings are \$5.00 per share is not meaningful—unless this earnings





announcement is contrasted to the market's expectation about the subject company's earnings.

Moreover, the market's expectation of the subject company's earnings may be conditioned by management's earlier public disclosure as to the projected earnings.

Therefore, the first issue in measuring the subject event is to disaggregate:

1. the unanticipated component of the subject company's earnings public announcement from
2. the expected component of the subject company's earnings public announcement.

The unanticipated component of the subject event is likely to be positive for some securities—and negative for other securities. Therefore, the test of statistical significance may be conditioned on the direction of the subject event.

This directional component can be measured by disaggregating the observation sample into:

1. a subsample of securities for which the event was positive and
2. a subsample of securities for which the event was negative.

Another issue with regard to the measurement of the subject event is the influence of “confounding” factors. Let's assume that the subject event is defined as the public announcement of a proposed merger. For many securities, this public announcement may coincide with an information release or

a public disclosure regarding the subject company's earnings.

This coincident information disclosure is typically called a “confounding event.” That is, a “confounding event” is an event that may distort or camouflage the effect of the particular economic event on the subject company's rate of return.

## ISSUES IN MEASURING AND NORMALIZING THE RATE OF RETURN

In the above description of the analytical procedures related to an event study, we isolated the company-specific component of the rate of return by using the market model. The rates of return should be “normalized”—so that the expected value of the unanticipated component of the rates of return is equal to 0 percent.

It is acceptable that the expected value of the unanticipated component of the rate of return related to the subject event not be equal to zero. And, it is equally acceptable that the unanticipated component of the rate of return related to the absence of the subject event be systematically nonzero.

However, the probability-weighted sum of the unanticipated components of the rate of return should equal zero.

### The Mean Adjustment

The use of the market model is a generally accepted procedure for adjusting rates of return. However, some event studies adjust rates of return by subtracting from these returns the average return of the securities during the pre-event time period.

This rate of return normalization adjustment procedure is called the “mean adjustment.”

### The Market Adjustment

Another generally accepted rate of return normalization adjustment procedure is to subtract (1) the market's coincident rate of return from (2) the subject security's actual rate of return.

This rate of return normalization adjustment procedure is called the “market adjustment.”

## RISK ADJUSTMENT NORMALIZATION PROCEDURES

The above-described normalization adjustment procedure used to normalize the unanticipated component of the rate of return to zero—using the market model—is called the “risk adjustment.”

The unanticipated component of the rate of return is estimated by:

1. computing an expected rate of return in time period  $t$  and then
2. subtracting the expected rate of return from the subject company's actual rate of return in time period  $t$ .

The first step in this normalization procedure is to estimate each security's beta coefficient. The beta coefficient is estimated by regressing:

1. the subject security's rates of return against
2. the total stock market's rates of return.

This regression analysis is performed over some pre-event measurement time period. Then, the rates of return across many securities in the same time period  $t$  are regressed against their historical betas, as of the beginning of time period  $t$ .

The intercept and the slope from this cross-sectional regression are then used to measure the subject company's expected rate of return.

Specifically, the subject security's expected rate of return in time period  $t$  is equal to (1) the cross-sectional alpha in time period  $t$  plus (2) the cross-sectional beta in time period  $t$  multiplied by (3) the subject security's historical beta.

Therefore, the subject security's unanticipated component of rate of return is equal to (1) the security's actual rate of return in time period  $t$  minus (2) the security's expected rate of return in time period  $t$  (i.e., estimated from the cross-sectional coefficients and the subject security's historical beta).

The final step in this normalization procedure for the unanticipated component of rate of return to equal zero uses a “control portfolio.” A “control portfolio” of sample securities is artificially constructed so as to have a beta coefficient equal to 1.

The unanticipated component of the rate of return in an event-related time period is computed as:

1. the rate of return of “control portfolio” less
2. the rate of return of the overall stock market.

## ISSUES IN EVALUATING THE RESULTS OF AN EVENT STUDY

In the earlier example, the  $t$  statistic was used to evaluate whether the subject economic event actually affected the subject security (i.e., the subject public company) rate of return. The use of the  $t$  test assumes that the rates of return of the securities from which the sample is drawn are normally distributed.

If the analyst has reason to believe that the rates of return of the sample securities are not normally distributed, then the analyst should use a “nonparametric” test to evaluate the event study result.

A “nonparametric” test, which is sometimes referred to as a “distribution-free” test, does not rely on the assumption of a normal distribution of rates of return.

### The Sign Test

One of the simplest nonparametric tests is called the “sign test.” Not only is the sign test distribution neutral, but it is also insensitive to the magnitude of the rates of return.

The sign test simply tests whether there are more positive returns (or more negative returns, as the case may be) than would be expected if the rates of return and the subject economic event are not related.

The calculation of the test statistic for the sign test is presented below:

$$Z = \frac{(X - 0.5N) - 0.5N}{0.5\sqrt{N}}$$

where:

$Z$  = the normal deviate

$X$  = the number of company-specific returns that are positive (or negative)

$N$  = the number of securities in the selected sample

For example, if 13 returns are positive out of a sample of 20 securities, then the normal deviate would equal 1.12. That result would mean that the analyst should fail to reject the null hypothesis. In this case, the null hypothesis is that the subject economic event has no effect on company-specific rates of return.

However, if 65 returns are positive out of a sample of 100 securities (i.e., the same proportion

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## **“The use of event studies is particularly common in commercial litigation claims of fraud against the market or of accounting fraud and misrepresentation.”**

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as 13 securities out of 20), then the normal deviate would equal 2.90. The analyst should reject the null hypothesis. Again, the null hypothesis is that the subject economic event has no effect on company-specific rates of return.

In other words, the analyst should conclude that the subject event does affect company-specific rates of return.

The sign test is one of the several “nonparametric” tests that analyst may use when:

1. the assumption of a normal distribution of rates or return is uncertain or
2. the subject securities’ rate of return data are limited to ordinal values.

### **Tests of Cross-Correlation**

The *t* statistic also assumes that the rates of return across the sample of securities are independent of one another. However, in many cases, security rates of return may not be mutually independent. This conclusion is true even after the rates of return are risk adjusted. That is, securities may have other common sources of risk—in addition to their exposure to the general stock market.

For example, the market-adjusted rates of return of public securities within the same industry may be correlated with each other. This type of cross-correlation is particularly common in event studies of mergers and acquisitions—when the propensity for merger/acquisition activity is an industry-wide phenomenon.

Damages analysts are often asked to identify events that may have caused economic damages. And, analysts are often asked to measure the amount of damages suffered by the claimant party. Analysts often use event studies to:

1. identify the damages event and
2. measure the amount of the economic damages suffered by the claimants.

The use of event studies is particularly common in commercial litigation claims of fraud against the market or of accounting fraud and misrepresentation. And, event studies are also useful to prove

(or disprove) the application of the efficient market hypothesis in dissenting shareholder appraisal rights matters involving public company mergers and acquisitions.

Sometimes, the phenomenon of cross-correlation may be corrected by expanding the risk-adjustment procedure in order to account for the portion of the rate of return that arises from:

1. industry affiliation or
2. the exposure to some other source of industry-wide risk.

### **SUMMARY AND CONCLUSION**

This discussion summarized the procedures related to the damages analyst’s use of the event study to test the efficient market hypothesis. In particular, this discussion summarized the use of an event study in a damages analysis to quantify the affect of a specifically defined economic event on an individual public company’s rate of return.

Such an economic event could relate to a management change, a particular management policy, a merger or acquisition, the award of a patent or license, and so on. Such an economic event could also relate to the failure of any of these expected events to actually occur.

This discussion presented the procedural mechanics for quantifying the effect of an event (or of a nonevent) on the rate of return of the subject publicly held security (or of the subject public company). From this analysis, it is relatively easy for the analyst to quantify the impact on the value of the subject company’s stock (and, therefore, the subject company’s overall value) of the specifically defined economic event.

This event study analysis may then be used to quantify the amount of economic damages, if any, suffered by the subject company stockholders related to the following:

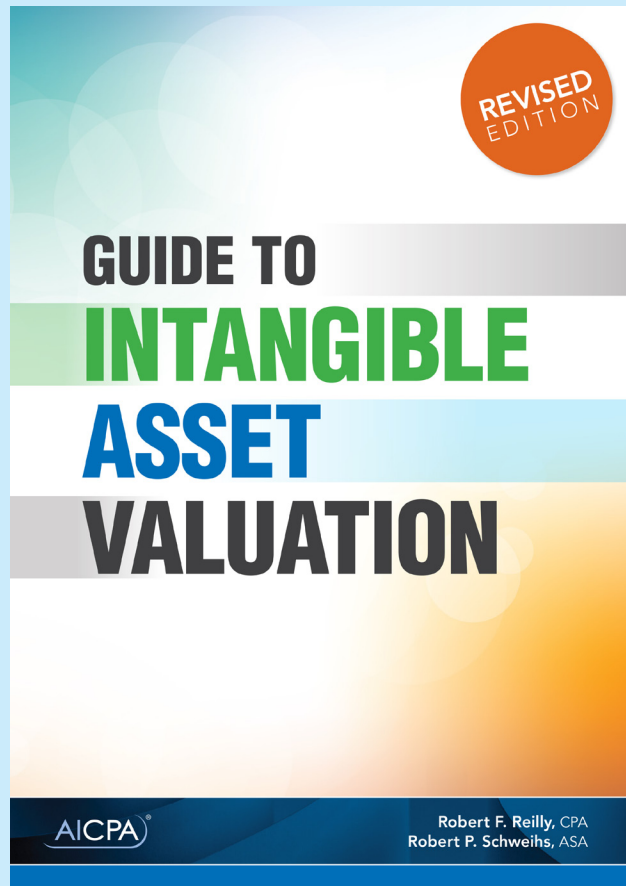
1. An identified economic event
2. The nonoccurrence of an identified economic event
3. The failure to publicly announce or disclose the identified economic event

Analysts who identify such economic events and then measure the associated economic damages should be familiar with both the theoretical underpinnings and the quantitative applications of event analyses.

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# 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.

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- Structuring the intangible asset valuation, damages, or transfer price assignment
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- 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)

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# Determining the Appropriate Arm's-Length Price for the Intercompany Transfer of Intellectual Property to an Intellectual Property Holding Company

*Many multistate corporations—particularly companies that operate in the retail and the services industries—may transfer certain intellectual property to an intellectual property holding company (“IPHC”). The function of the IPHC is to centralize, manage, protect, develop, and commercialize the corporation’s intellectual property. After the multistate corporation’s intellectual property is centralized in the IPHC, the IPHC enters into a license with the corporation’s various operating business units related to the use of the intellectual property. The operating business units typically operate in the various states across the country. The IPHC is the intellectual property licensor and the various operating business units are the intellectual property licensees. Transfer price analysts (“analysts”) are often asked to opine on the fair arm’s-length price (“ALP”) for the use license related to the IPHC-owned intellectual property. These analysts are asked to quantify the ALP royalty rate that an independent licensor would charge to an independent licensee for the use license of the subject intellectual property. In such instances, analysts typically apply generally accepted intangible property transfer pricing methods in order to determine the fair ALP royalty rate for the subject intellectual property intercompany license.*

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## INTRODUCTION

In recent years, many multistate corporations have formed an intellectual property holding company (“IPHC”) subsidiary and then transferred legal title to the corporation’s intellectual property to that IPHC. The transferred intellectual property is then centralized and organized in the IPHC. The intellectual property is then managed by, protected by, developed by, and commercialized by an intellectual property centralized management function within the IPHC entity.

For purposes of this discussion, the term “intellectual property” includes patents, copyrights, trademarks, and trade secrets. Intellectual property is a subset of the broader category of general commercial intangible property. For simplicity, this discussion will use the terms intellectual property and intangible property interchangeably.

At the time of the initial transfer of the intangible property from the multistate corporation (usually from the parent corporation) to the IPHC, the IPHC will typically pay a fair market value (“FMV”)

price for the transferred intangible property. An important consideration in the formation of the IPHC is the determination of that FMV transfer price (or buy-in price) for that initial transfer of the intangible property from the parent company to the IPHC entity.

After the intellectual property transfer, the specialized and centralized management function at the IPHC protects, controls, develops, and commercializes the corporation's intellectual property activities. The intellectual property protection and commercialization activity may include the license of the intellectual property—both inside of and outside of the multistate corporation.

The intellectual property now owned by the IPHC is then licensed for use by the corporation's business units operating in other states.

Such intercompany intellectual property transfers are implemented for corporate strategic planning, intellectual property management, legal protection and risk reduction, and (potentially) state income tax consideration purposes.

For purposes of effecting such an intellectual property centralized management program, the corporation is typically a business enterprise that generates business income in several states. And, the transferred intellectual property is typically used in the generation of that business income in the various states in which the corporation operates.

In a common structure for this intellectual property centralized management activity, the multistate corporation transfers intellectual property such as trademarks, trade names, service marks, service names, trade dress, and domain names to the newly organized IPHC. For simplicity, this discussion will refer to this entire bundle of marketing-related intellectual property as "trademarks and trade names" or simply "trademarks."

In the conduct of its normal business operations, the IPHC licenses the use of the trademarks to the corporation's business units operating in other states.

The operating business units pay a use license fee or royalty payment, sometimes in the form of an intercompany transfer price, to the IPHC. This license royalty payment is for the use of the trademarks and trade names that are now owned by—and managed by—the IPHC.

Obviously, the terms and conditions of the intellectual property license agreement will affect the intercompany economics of the intellectual property centralized management function.

Therefore, another important consideration in the formation of the IPHC is: What is the fair, market-derived arm's-length price ("ALP") for the

intercompany license of the intellectual property that is owned and managed by the IPHC?

Such an ALP should consider both the rights and responsibilities of the trademark licensor (the IPHC) and the rights and responsibilities of the trademark licensees (the various operating units).

There are numerous legal, business, risk management, and operational reasons to implement such an intellectual property centralized management program. One incidental benefit to such an IPHC formation may be a reduction in the total state income tax expense of the consolidated corporation. This is because, typically, the IPHC state does not subject intellectual property/license royalty income to state income or state franchise tax.

Typically, the intercompany transfer payments (e.g., the ALP royalty payments for the use license of the IPHC-owned trademarks) represent deductible expenses for determining taxable income in the various states in which the multistate corporation generates business income. But, the intercompany transfer payments (e.g., the ALP royalty payments for the license use of the trademarks to the IPHC) will not represent taxable income for purposes of determining the IPHC state income tax liability.

Accordingly, the parent corporation's consolidated federal income tax expense is typically not affected by such an intellectual property centralized management program. This statement is true because all of the intercompany license royalty payments are between the domestic subsidiaries of the domestic parent corporation.

However, as one potential impact of the intercompany license royalty payments, the corporation's total state income tax expense may be reduced after the formation of the IPHC to centrally manage the intellectual property function.

Of course, the real benefits of the functions of the IPHC are the efficiency and effectiveness of the management of the corporation's intellectual property. The corporation should consider any reduction in consolidated state income taxes as an incidental benefit. Such a reduction in consolidated income taxes should not be the principal consideration in the cost/benefit analysis related to the formation of an IPHC.

This discussion presents several of the transfer pricing, economics, and corporate management aspects regarding the design and implementation of such an intellectual property centralized management program.

Some of the issues that are relevant to the corporation management (and to management's professional advisers) regarding this topic include the following:

1. The identification of which intellectual property to include in the IPHC management program
2. The legal creation of the IPHC licensor
3. The quantification of the FMV price or “buy-in payment” for the initial transfer of the intellectual property to the IPHC
4. The methods of quantifying an arm’s-length transfer price to the license the intellectual property
5. The significant economic pros and cons of implementing such an intellectual property centralized management program.

## IDENTIFICATION OF THE TRANSFERRED INTELLECTUAL PROPERTY

Typically, the intangible property transferred from the parent corporation to the IPHC includes one or more of the four intellectual property categories:

1. Trademarks and trade names
2. Patents
3. Copyrights
4. Trade secrets

In addition, the parent corporation may sometimes also transfer related commercial intangible assets to the IPHC. For a commercial intangible asset to exist from a valuation, accounting, or legal perspective, it will typically possess certain attributes.

Some of these attributes include the following:

- It should be subject to specific identification and recognizable description.
- It should be subject to legal existence and protection.
- It should be subject to the right of private ownership, and this private ownership (which may include other property) should be legally transferable.
- There should be some tangible evidence or manifestation of the existence of the intangible asset (e.g., a contract or a license or a registration document).
- It should have been created or have come into existence at an identifiable time or as the result of an identifiable event.
- It should be subject to being destroyed or to a termination of existence at an identifiable time or as the result of an identifiable event.

In other words, there should be a specific bundle of legal rights associated with the existence of the commercial intangible assets transferred to the IPHC.

For a transferred intellectual property or an associated commercial intangible asset to have a quantifiable value from an economic perspective, it should possess certain additional attributes.

Some of these additional requisite attributes include the following:

- It should generate some measurable amount of economic benefit to its owner/operator. This economic benefit could be in the form of an income increment or of a cost decrement. This economic benefit may be measured in any of several ways, including net income, net operating income, net cash flow, and the like.
- It should enhance the value of other assets with which it is associated. The other assets may include tangible personal property, real estate, or other identifiable intangible assets.

The appropriate use license ALP is not necessarily a direct function of the transferred intellectual property FMV. However, before the intellectual property license is created, the intellectual property is transferred from the parent corporation to the IPHC. And, that initial transfer of the corporation intangible property to the IPHC is typically made based on an FMV transfer price.

There may be a substantial distinction between the legal existence of an intellectual property and the economic value of that intellectual property. An example of this phenomenon would be the new registration of a legally binding and enforceable patent that, upon creation, immediately and permanently locked in the corporation’s vault. If the patent is never used in the production of, or the protection of, income, then it has little economic value—even though it has legal existence.

Generally, analysts categorize any commercial intangible assets transferred with the corporation’s intellectual property into several distinct categories. This categorization of commercial intangible assets is used for asset identification and classification purposes and, therefore, it may be relevant for purposes of implementing an intellectual property centralized management function.

Commercial intangible assets in each category are generally similar in nature and function. Also, the commercial intangible assets may be grouped in the same category when similar valuation and transfer price methods apply to that group of assets.



Some of the common categories of commercial intangible assets include the following:

- Technology-related (e.g., engineering drawings)
- Customer-related (e.g., customer lists)
- Contract-related (e.g., favorable supplier contracts)
- Data-processing-related (e.g., computer software)
- Human-capital-related (e.g., a trained and assembled workforce)
- Marketing-related (e.g., customer contracts)
- Location-related (e.g., leasehold interests)
- Goodwill-related (e.g., going-concern value)

Intellectual property is a special subcategory of intangible assets. Intellectual property manifests all of the legal existence and economic value attributes of other intangible assets. However, because of its special legal status, intellectual property enjoys special legal recognition and protection.

Unlike other commercial intangible assets which may be created by the multistate corporation in the normal course of business operations, intellectual property is created by human intellectual and/or inspirational activity. Such activity (although not always planned) is specific and conscious. And, such creativity can be attributed to the activity of identified, specific individuals.

Because of this unique creation process, intellectual property is generally registered under, and protected by, specific federal and state statutes.

Like other intangible assets, intellectual property may also be grouped into categories. The intellectual property in each category is generally similar in nature, feature, method of creation, and legal protection. Likewise, similar valuation, transfer pricing, damages measurement, and other methods of economic analysis would apply to the intellectual property in each category.

One categorization of intellectual property follows:

- Creative (e.g., copyrights)
- Innovative (e.g., patents)

Corporate trademarks and trade names are the most common type of intangible property subject to the above-described intellectual property centralized management program. However, many types of intangible assets and intellectual property may be transferred to an IPHC as part of the intellectual property centralized management program.

As mentioned above, corporations in the retail and services industries have availed themselves of this intellectual property management strategy. This emphasis on intellectual property management may be because of the importance of corporate trademarks and trade names in the retail and services industries.

In addition, this emphasis on intellectual property management is due to the practical necessity to coordinate, protect, manage, control, and commercialize the use of trademarks and trade names in the retail and services industries.

However, corporations in the wholesale, distribution, manufacturing, banking, and other industries may also coordinate, protect, manage, and commercialize the use of their intellectual property, as well. Therefore, the use of an IPHC intellectual property centralized management program is a viable strategic option regarding many types of intellectual property in many industries.

Some of the factors that the multistate corporation management consider with regard to identifying which intellectual property to include in the intellectual property management centralized program are discussed next.

## THE INTERCOMPANY TRANSFER OF INTANGIBLE PROPERTY

In determining which intangible property to include in the intellectual property centralized management program, the multistate corporation management will typically consider the following factors:

- Which corporation intangible property has legal existence.
- Which corporation intangible property has economic substance.
- Which corporation intangible property can be legally transferred to the IPHC.
- Which corporation intangible property has a practical business reason to be transferred to the IPHC.
- Which corporation intangible property is used in normal business operations in other states.
- Which intangible property can be associated with a license royalty rate or other transfer price, in order to effectively quantify the licenseback component of the intellectual property centralized management program.
- Which intellectual property has a reasonably long-term (and determinable) useful economic life.

- Which intellectual property will not have to be sold, abandoned, or otherwise transferred out of the IPHC in the foreseeable future.

As mentioned above, corporate trademarks and trade names are often included in the IPHC centralized management program. Other intangible property could also meet the selection criteria listed above.

In the case of trademarks and trade names, a number of issues should be considered by the corporation management, including the following:

- Should all trademarks and trade names be transferred?
- Should only the corporation principal trademark be transferred?
- Should all individual brand names, product names, and service marks be transferred?
- Should any future trademarks and trade names developed outside of the IPHC be transferred to the IPHC as they are developed?
- Should the trademarks be transferred in perpetuity? Or should the trademarks be transferred only for a specified limited term?

These corporation management questions cannot be answered in a vacuum. These questions may only be answered after careful consideration of the selection criteria listed above.

And, these questions may only be answered after a thorough consideration of the corporation purpose and objective of the intellectual property centralized management program.

## CREATION OF THE IPHC

The formation of the IPHC entity is a legal matter. The corporation management will work with legal counsel before the corporation implements the intellectual property centralized management program. Legal title to the trademarks, trade names, and/or other intangible property should be effectively transferred to the newly created IPHC entity. Management will consult with legal counsel that is familiar with both intellectual property law and the formation of an IPHC.



The new IPHC will have both form and substance. In addition, the IPHC will have a legitimate business purpose related to the centralized management, protection, and commercialization of intangible property.

This centralized management of intangible property will include internal control considerations as well as external control considerations. The internal control elements may include accounting, legal, administrative, financing, and operational control. The external control elements may include the exploration of the possibility of the license, joint venture, and commercialization of the corporation trademarks, trade names, technology, copyrights, and other intellectual property.

The IPHC would be the legal entity to both inbound license and outbound license various intangible property to/from independent, third-party licensees in arm's-length transactions. As with all corporation goals and objectives, the intangible property commercialization (i.e., licensing) initiatives do not have to succeed in order for the intellectual property centralized management program to be successful.

To accomplish the business purposes of the IPHC, it is common for the parent corporation to transfer additional assets (in addition to the intangible property) to the IPHC. The parent corporation may transfer cash balances and certain banking relationships to the IPHC.

Legal, administrative, and marketing employees (all with an intangible property relationship) may be placed on the payroll of the IPHC. These employees are responsible for the management, protection, and control of the corporation's intangible property. These employees may also be responsible for developing and implementing the company's intangible property inbound and outbound licensing and other commercialization activities.

Finally, the parent corporation may also transfer office furniture and fixtures and any other tangible assets that will be used by the IPHC employees.

As with any functional business enterprise, the new IPHC will prepare financial statements. These statements should report the results of operations and the financial position of the IPHC. The results of operations will include any IPHC licensing and investment income less the payroll, rent, utilities, and administrative costs of the IPHC business operations.

Administrative, accounting, or other services provided by the corporate office to the IPHC entity are usually charged to the IPHC entity on an inter-company basis. The IPHC financial position will include any cash and investments, any real estate and tangible personal property, and the intangible property transferred to the IPHC.

## INTANGIBLE PROPERTY INITIAL “BUY-IN” TRANSFER PRICE

After the IPHC is created, the parent corporation will typically transfer the intangible property to the IPHC at a fair market value price. Effectively, this fair-market-value-based transfer price represents the IPHC buy-in for the transferred intangible property.

Typically, either the parent corporation or the IPHC will retain an experienced valuation analyst to estimate the fair-market-value-based transfer price for the transferred intangible property. That analyst will apply generally accepted intangible property valuation approaches and methods.

## INTANGIBLE PROPERTY VALUATION APPROACHES AND METHODS

There are three generally accepted intangible property valuation approaches: the cost approach, the market approach, and the income approach. One or more of these generally accepted approaches is used to estimate the fair-market-value-related buy-in price for the initial transfer of the intangible property to the IPHC.

There are a number of generally accepted valuation methods within each intangible property valuation approach. Each of the methods within an approach is based on common economic principles.

And, there are a number of valuation procedures that are used to apply each intangible property valuation method. The valuation procedures are performed in order for the analyst to select and apply

the individual valuation variables that are needed to complete the valuation method.

A detailed description of the generally accepted intangible property valuation approaches and methods is beyond the scope of this discussion. However, Exhibit 1 provides a listing of the generally accepted intangible property valuation approaches and methods.

The analyst should consider all generally accepted valuation approaches and methods in the fair market value valuation of the intangible property that is initially transferred to the IPHC.

## COST APPROACH VALUATION CONSIDERATIONS

Some intangible property lends itself to cost approach valuation analyses. The following considerations should be documented by the analyst as part of the buy-in price fair market value valuation.

All cost approach methods include both (1) a current cost measurement and (2) a depreciation measurement.

The analyst should explain and document the consideration of the following four cost components in the cost approach analysis:

- Direct costs (including direct materials and direct labor)
- Indirect costs (including development-related overhead and administrative expenses)
- Developer's profit (on the sum of the direct costs and the indirect costs)
- Entrepreneurial incentive (that is, the opportunity cost—or the owner/operator's lost income—during the intangible property estimated replacement period)

The analyst should also explain and document the consideration of the following three depreciation components in the cost approach analysis:

- Physical depreciation (not a significant factor in most intangible property valuations)
- Functional/technological obsolescence (where the analyst considers the intangible property estimated useful economic life—or “UEL”)
- Economic/external obsolescence (where the analyst considers the intangible asset owner/operator's return on investment—or ROI—related to the intangible property cost approach value indication)

In the valuation of the initial intangible property transfer to the IPHC, the analyst should explain and document the application of the following cost approach valuation formula:

Current cost measurement  
 less: Physical depreciation (if any)  
 less: Functional obsolescence  
 less: Technological obsolescence (if quantified separately from functional obsolescence)  
 less: Economic obsolescence (a component of external obsolescence)  
 equals: Intangible property fair market value

In addition, the analyst should consider the following cost approach factors:

- All cost components (including the opportunity cost component) included in the current cost measurement
- The treatment of any excess capital (i.e., related to the intangible property development) costs and any excess operating costs (related to the operation of the intangible property)
- All considerations of (and estimation of) the intangible property UEL
- All considerations of (and estimation of) economic obsolescence that may exist at the intangible property owner/operator entity level

## MARKET APPROACH VALUATION CONSIDERATIONS

The analyst should be aware that market approach valuation pricing metrics are based on either comparable or guideline:

- licenses of intangible property,
- sales of intangible property, or
- companies that use intangible property.

The initial transfer fair market value valuation should explain and document the analyst's consideration of—and selection/rejection of—the following market approach variables and procedures:

### Exhibit 1 Intangible Property Generally Accepted Valuation Approaches and Methods

#### Cost Approach Methods

- Reproduction cost new less depreciation (“RPCNLD”) method
- Replacement cost new less depreciation (“RCNLD”) method
- Trended historical cost less depreciation (“TOCLD”) method

#### Market Approach Methods

- Relief from royalty (“RFR”) method
- Comparable uncontrolled transactions (“CUT”) method
- Comparable profit margin (“CPM”) method

#### Income Approach Methods

- Differential income (with/without) method
- Incremental income method
- Greenfield method
- Profit split method (or residual profit split method)
- Disaggregated method
- Distributor method
- Residual (excess) income method
- Capitalized excess earnings method (“CEEM”)
- Multiperiod excess earnings method (“MEEM”)

- Any quantitative/qualitative analysis with regard to the ownership and operation of the intangible property
- The guideline license/sale/company selection criteria
- The actual guideline license/sale/company selection (and rejection)
- The verification of the selected guideline transactional data
- The analysis of the selected guideline transactional data
- The selection of the appropriate pricing metrics to use in the subject market approach analysis
- The selection of the specific pricing multiples to apply to the subject intangible property financial or operational fundamentals
- The actual application of the selected pricing multiples to the subject intangible property financial or operational metrics
- The conclusion of the various market approach value indications based on the application of the subject-specific pricing multiples



In the initial transfer fair market value valuation, the analyst should consider and document the following market approach considerations:

- The impact of applying seasoned guideline intangible asset transactional data with regard to a development stage intangible property
- The impact of applying development stage guideline intangible property transactional data with regard to a seasoned intangible property
- The valuation date state of the competition in the owner/operator industry
- The analysis of the guideline company and/or industry average comparable profit margins; the important valuation consideration is whether the intangible property is the only reason for the difference in the operating profit margins between (1) the intangible property owner/operator company and (2) the selected CPM companies

## INCOME APPROACH VALUATION CONSIDERATIONS

Some intangible property lends itself to income approach valuation analyses. The following analyst considerations should be documented in the initial buy-in price fair market value valuation.

The analyst should be aware that, in the intangible property income approach, the common income measurement concepts include the following:

- Incremental (or differential) owner/operator revenue (selling price and/or units sold)
- Decremental owner/operator expense (operating or other)
- Decremental owner/operator investment (capital or other)
- Decremental risk to the owner/operator (resulting in a lower discount rate)
- A split of the owner/operator overall business enterprise income
- Any excess owner/operator overall business enterprise income

Some of the common income measures (related to the transferred intangible property) that may be used in the income approach analysis include the following:

- Earnings before interest, taxes, depreciation, and amortization (“EBITDA”)
- Earnings before interest and taxes (“EBIT”)

- Net operating income (“NOI”) (EBITDA less income taxes)
- Net income
- Net cash flow

The analyst should associate the above-mentioned income concepts and income measures to the transferred intangible property. That is, the income approach valuation should incorporate only the income associated with the ownership of—or the operation of—the transferred intangible property.

That is, the fair market value valuation should explain which of the following methods and procedures were used (and why they were used):

1. Yield capitalization methods, based on a nonconstant expected growth rate in the transferred intangible property income projection
  - a. with the income projected over a finite intangible property UEL income projection period (without a terminal value) or
  - b. with the income projected over a finite intangible property UEL income projection period with a terminal value
2. Direct capitalization methods, based on a constant expected growth rate in the transferred intangible property income projection
  - a. with the intangible-property-related income capitalized over a finite UEL projection period or
  - b. with the intangible-property-related income capitalized over a perpetuity UEL projection period

For each of the above-mentioned income approach valuation methods, the estimation of the intangible property UEL is an important part of the fair market value valuation. The estimated UEL affects the income approach analysis and conclusion.

The analyst should explain two components of the UEL estimation. The first component is the term of the UEL—for example, the number of years of remaining useful life in the income projection. The second component is the rate of income decay over the UEL. This factor relates to the slope of the intangible property income decay curve.

That is, will the transferred intangible property income remain constant over the UEL? Will the intangible property income decline over the UEL? Will that future income decrease occur at a constant

rate of change—or at a nonconstant (accelerating) rate of change?

The analyst should decide and document the following income approach considerations in the fair market value valuation analysis:

- How the analysis matched the selected discount/capitalization rate with the selected intangible property income measure
- How the analysis matched the selected discount/capitalization rate with the intangible property level of risk
- How the analyst considered the valuation date state of the competition in the owner/operator industry
- How the analysis considered all subsequent (to the valuation date) capital expenditures, R&D expenses, marketing expenditures, etc., related to the intangible property ownership/operation
- How the fair market value valuation analyzed only the amount of income that is directly related to (or associated with) the intangible property
- How the fair market value valuation present valued the projected income over either:
  - the intangible property average UEL
  - down the intangible property UEL income decay curve

In the fair market value valuation, the analyst should explain and document the decision process with regard to:

1. the selection of the length of the intangible property UEL period and
2. the selection of the shape of the intangible property UEL decay curve.

## THE TRANSFERRED INTANGIBLE PROPERTY VALUATION SYNTHESIS AND CONCLUSION

The analyst should explain (and document) the transferred intangible property valuation synthesis and conclusion process. The synthesis and conclusion is the last procedure in the analyst's process of reaching a fair market value conclusion.

In the valuation synthesis and conclusion, the analyst typically performs a procedure that is often



referred to as the valuation reconciliation. In this reconciliation, the analyst reviews all of the intangible property valuation analyses and the various intangible property value indications.

The analyst typically assigns either a quantitative or a qualitative weighting to each value indication. Based on the results of this valuation reconciliation, the analyst selects the final value conclusion for the intangible property transferred to the IPHC.

## INTANGIBLE PROPERTY TRANSFER PRICE CONSIDERATIONS

The second component of the intangible property analysis is to determine the fair ALP royalty rate related to the license of the intangible property from the IPHC to the various business operating units. In the intangible property license agreement, the IPHC is the intangible property licensor and the various business operating units are the intangible property licensees.

To estimate an ALP royalty rate for the license of the intangible property from the IPHC to the operating entities, analysts often rely on the intercompany transfer pricing guidance provided in the regulations to Internal Revenue Code Section 482.

Typically, state taxing authorities do not require that the taxpayer corporation adopt an ALP that was calculated by reference to the Section 482 regulations. However, the Section 482 regulations are generally considered to be authoritative guidance, particularly with regard to an intangible property intercompany transfer price that is applied within an income tax context.

Therefore, while analysts do not have to strictly comply with the Section 482 regulations for these intangible property license purposes, analysts typically consider the guidance provided by the Section 482 regulations transfer price methods.

Internal Revenue Code Section 482 typically applies to an intangible property intercompany transfer price analysis that would be performed for federal income tax purposes. Section 482 deals with the allocation of income and deductions among taxpayers.

With regard to intangible property, Section 482 applies to the transfer of intangible property between controlled entities within a common taxpayer corporation. So, Section 482 would apply to the international transfer of intangible property between two (or more) controlled entities.

For example, Section 482 typically applies to a domestic parent corporation taxpayer when a domestic subsidiary (a “controlled entity”) develops intangible property and transfers that intangible property to a foreign subsidiary.

After the initial transfer (which would be a taxable event), let’s assume that the domestic entity enters into a use license agreement with the foreign entity. That is, the foreign entity allows the domestic entity to use the (now foreign-owned) intangible property in exchange for a license royalty payment. Such a use license payment would represent taxable income in the foreign taxing jurisdiction. And, it would represent a tax deduction in the United States.

The Section 482 regulations provide that all such intercompany transfer prices should be based on the arm’s-length standard. Regulation 1.4821(b)(1) relates to any intercompany transfer price: “the standard to be applied in every case is that of a taxpayer dealing at arm’s length with an uncontrolled taxpayer. A controlled transaction meets the arm’s length standard if the results of the transaction are consistent with the results that would have been realized if uncontrolled taxpayers had engaged in the same transaction under the same circumstances (arm’s length result).”

Regulation 1.482-1T(b)(2) explains that there are specified ALP methods related to the intercompany transfers of tangible property and intangible property. Specifically, “Sections 1.482-2 through 1.482-6 provide specific methods to be used to evaluate whether transactions between or among members of the controlled group satisfy the arm’s length standard, and if they do not, to determine the arm’s length result.”

With regard to each of the allowable transfer price methods, the regulations require that the

analyst select and apply the single best method. This procedure is called the “best method rule.” Regulation 1.482(c)(1) explains that “the arm’s length result of a controlled transaction must be determined under the method that, under the facts and circumstances, provides the most reliable measure of the arm’s length result.”

This so-called best method rule is applicable for intentional intercompany intangible property transfers—that is, transfers that have federal income tax implications. Applying the best method rule, the analyst will select and apply transfer price measurement method—that is, the best method.

With regard to determining an ALP for IPHC intangible property management purposes, the analyst may conclude a transfer price based on a synthesis of various transfer price methods. That is, the application of the so-called best method rule is not required in the analyst’s determination of an ALP for the intangible property license between the IPHC and the related-party domestic operating companies.

Regulation 1.482(c)(2) provides the criteria for the analyst’s selection of the single best method for measuring the ALP for federal income tax purposes. This regulation indicates that “data based on the results of transactions between unrelated parties provides the most objective basis for determining whether the results of a controlled transaction are at arm’s length.”

The criteria that the analyst should consider to select the best method for purposes of measuring the federal income tax transfer price are the following:

1. Comparability. The analyst considers the comparability between the controlled transaction or taxpayer and the uncontrolled transaction or taxpayer.
2. Data and assumptions. The analyst considers the completeness and accuracy of the underlying data, the reliability of the assumptions, and the sensitivity of the results to possible deficiencies in the data and assumptions.
3. Confirmation of the results by another method. “If the best method rule does not clearly indicate which method should be selected, an additional factor that may be taken into account in selecting a method is whether any of the competing methods produce results that are consistent with the results obtained from the appropriate application of another method” (see Regulation 1.482(c)(2)(iii)).

Regulation 1.482(d) discusses the comparability between (1) the controlled taxpayer or transaction and (2) the uncontrolled taxpayer or transaction:

[F]or this purpose, the comparability of transactions and circumstances must be evaluated considering all factors that could affect prices or profits in arm's length dealings (comparability factors). . . . Such factors include the following:

- (i) functions,
- (ii) contractual terms,
- (iii) risks,
- (iv) economic conditions, and
- (v) property or services.

Regulation 1.482-3 describes the allowable methods for calculating the intercompany transfer price for tangible property. These methods are beyond the scope of this discussion, which focuses entirely on intangible property.

Nonetheless, the analyst should at least be aware of the tangible property intercompany transfer price methods described in the Section 482 regulations:

1. The comparable uncontrolled price method (see Regulation 1.482-3(b))
2. The resale price method (see Regulation 1.482-3(c))
3. The cost plus method (see Regulation 1.482(d))
4. The comparable profits method (see Regulation 1.482-5)
5. The profit split method (see Regulation 1.482-6)
6. Unspecific (other) methods (see Regulation 1.482-3(e))

Regulation 1.482-4 describes the allowable methods for calculating the intercompany transfer price for intangible property. Regulation 1.482-4 is titled "methods to determine taxable income in connection with a transfer of intangible property." Nonetheless, regulation 1.482-4(b) is titled "Definition of intangible."

This regulation defines the term "intangible" as follows:

For purposes of section 482, an intangible is an asset that comprises any of the following items and has substantial value independent of the services of any individual—

- (1) Patents, inventions, formulae, processes, designs, patterns, or know-how;
- (2) Copyrights and literary, musical, or artistic compositions;

- (3) Trademarks, trade names, or brand names;
- (4) Franchises, licenses, or contracts;
- (5) Methods, programs, systems, procedures, campaigns, surveys, studies, forecasts, estimates, customer lists, or technical data; and
- (6) Other similar items. For purposes of section 482, an item is considered similar to those listed in paragraph (b)(1) through (5) of this section if it derives its value not from its physical attributes but from its intellectual content or other intangible properties.

Regulation 1.482-4(c) describes the comparable uncontrolled transaction ("CUT") method. The CUT method is based on the selection and analysis of the arm's-length sales or licenses of similar intangible property.

As stated in regulation 1.482-4(c)(1):

[T]he comparable uncontrolled transaction method evaluates whether the amount charged for a controlled transfer of intangible property was arm's length by reference to the amount charged in a comparable uncontrolled transaction.

Regulation 1.482-4(c)(2) describes the comparability and reliability considerations related to the application of the CUT method. As defined in this regulation, reliability looks at whether the uncontrolled transaction involves the transfer of the same intangible property under the same, or substantially the same, circumstances as in the controlled transaction. The regulation also states that the degree of comparability of the controlled transaction and the selected uncontrolled transactions is based on a set of comparability factors.

These comparability factors include the following two categories of factors:

- Category 1: The comparability of the intangible property:
  - Are the CUT intangible property and the taxpayer company intangible property used in connection with similar products or processes within the same general industry or market?
  - Do the CUT intangible property and the taxpayer company intangible property have the same profit potential?
- Category 2: The comparability of the circumstances:



- Are the terms of the transfer (for example, exploitation rights, exclusivity, use restrictions, and geography restrictions) similar?
- Is the stage of development (between the CUT intangible property and the taxpayer company intangible property) similar?
- Are the rights to receive intangible property updates, modifications, and revisions similar?
- Is there a similar degree of uniqueness, including legal protection (between the CUT intangible assets and the taxpayer company intangible property)?
- Is the duration of the license or other agreement similar?
- Are the product liability or other economic risks similar?
- Is the existence of ongoing business relationships (if any) between the transferor and the transferee similar?
- Are the functions performed by the transferor and the transferee similar?

Regulation 1.482-4(a)(1) describes the CUT method by providing illustrative examples of the selection, adjustment, and application of CUT intangible property license agreements and royalty rate data.

Regulation 1.482-5 describes and illustrates the application of the comparable profits method. When used in other (non-Section 482) contexts, this transfer price method is also called the comparable profit margin method.

Whatever title the analyst applies to this method, the transfer price method procedures are the same:

1. The analyst selects uncontrolled companies (in the Section 482 case, uncontrolled taxpayer companies) that can be compared to the taxpayer company. These uncontrolled companies either operate or don't operate (depending on which side of the taxpayer company intercompany transfer is tested) a similar intangible property to the taxpayer's intangible property.
2. The analyst selects the appropriate profit level indicator ("PLI") to use as the intercompany transfer price test metric. The common PLIs are listed in the Section regulations as follows:
  - a. Rate of return on the amount of capital employed (that is, a measure of return on investment).

- b. Various profit margin financial ratios, including the ratio of operating profit margin to sales and the ratio of gross profit margin to sales (that is, measures of profit margin). The regulations also allow for other PLIs.

3. The analyst selects the tested party within the taxpayer intangible property transferor. The tested party can be either the transferor of the taxpayer intangible property or the transferee of the taxpayer intangible property. The selection of the tested party is based on which party has the most reliable data and requires the least amount of adjustments.
4. The appropriate intercompany transfer price is the price that brings the tested party's PLI (either a return on investment or a profit margin on sales) in line with the selected uncontrolled companies' PLIs.

When selecting the uncontrolled comparable companies, the analyst should be concerned with the comparability and reliability factors described in the preceding list. In particular, the analyst should consider the functional, risk, and resource comparability of the selected comparable companies compared to the taxpayer company tested party.

Regulation 1.482-6 describes the profit split method for measuring the appropriate intercompany transfer price:

The profit split method evaluates whether the allocation of the combined operating profit or loss attributable to one or more controlled transactions is arm's length by reference to the relative value of each controlled taxpayer's contribution to that combined operating profit or loss. The combined operating profit or loss must be derived from the most narrowly identifiable business activity of the controlled taxpayers for which data is available that includes the controlled transactions (relevant business activity).

To allocate the taxpayer company profit under the profit split method (that is, to determine the appropriate profit split percentage), the analyst may use one of two allowable profit allocation methods:

1. the comparable profit split method or
2. the residual profit split method.

The comparable profit split method compares the division (or split) of operating profits among the

controlled taxpayer entities to the division (or split) of operating profits among the selected uncontrolled companies engaged in similar activities under similar circumstances.

It is noteworthy that the comparable profit split method may not be used if the combined operating profit (as a percentage of the combined assets) of the uncontrolled comparable companies varies significantly from the operating profit earned by the controlled taxpayer entities.

In the residual profit split method, first the analyst identifies and applies a fair rate of return to the taxpayer company's routine (also called "contributory") tangible property and intangible property. The regulation looks at the contribution that these routine (or contributory) assets make to the uncontrolled taxpayer business. Therefore, the regulation uses the term "routine contributions."

Routine contributions are contributions of the same or a similar kind to those made by uncontrolled companies involved in similar business activities for which it is possible to identify market returns. Routine contributions ordinarily include contributions of tangible property, services, and intangible property that are owned by uncontrolled companies engaged in similar activities.

The analyst typically performs a functional analysis to identify these contributions according to the functions performed, risks assumed, and resources employed by each of the controlled taxpayer entities. Market returns for the routine contributions are determined by reference to the returns achieved by uncontrolled companies engaged in similar activities.

Finally, the unspecified methods (as described in regulation 1.482-4(d) for determining the intangible property intercompany transfer price are any methods not described as allowable methods in the regulations.

Such an unspecified method should meet the comparability and reliability criteria previously described and should be the best method to measure the ALP of the intercompany transfer of the taxpayer intangible property.

## THE INTANGIBLE PROPERTY LICENSE ALP SYNTHESIS AND CONCLUSION

As mentioned above, for intercompany transfers of intangible property for federal income tax purposes, the intercompany license ALP is always based on the application of the so-called best method rule. For IPHC intangible property management pur-

poses, the intercompany license ALP may be based on a synthesis of two or three of the aforementioned transfer price methods. Depending upon the quantity and quality of available data, the analyst may have to rely on a single transfer price method in the final determination of the intercompany intangible property license ALP.

A common intangible property license royalty formula is one where the transfer price is expressed as a percentage of net sales (e.g., the fair ALP for a retail company trademarks may be 2 percent of net sales).

However, license ALP royalty formulas based on a percent of gross profit or net profit are not uncommon. And, particularly for the technology-related intangible property of a manufacturing company (e.g., engineering drawings or patents), a license ALP royalty formula based upon a number of dollars per units produced (or units sold) is not uncommon.

What is noteworthy is that, for most companies, the intangible property license ALP royalty formula may change over time. Many companies that have implemented intangible property centralized management programs re-evaluate their ALP royalty formula periodically. Some companies re-evaluate the appropriate intangible property license ALP royalty formula on an annual basis.

If economic conditions in the industry change, if the microeconomic dynamics of the subject company change, or if the subject intangible property begins to experience obsolescence (or other forms of economic decay), then the appropriate intangible property license ALP royalty formula may change over time. While the consideration of the generally accepted intercompany transfer price methods remains valid, the periodic applications of these methods may result in different license ALP royalty.

## OTHER CONSIDERATIONS

As with any asset management or other corporate strategy program, there are costs as well as benefits to an IPHC intangible property management program. These costs should be carefully budgeted and thoroughly understood before management decides to implement the intellectual property centralized management program.

The costs of the intangible property management program include possibly significant set-up costs. These costs include the cost of legal advice, the cost of intellectual property fair market value for the IPHC buy-in, the cost to legally create the IPHC corporate entity, and the cost to legally (and physically) transfer tangible property, intangible property, personnel, and operations to the IPHC entity.

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**“[T]here may also be some state income tax benefits associated with the intangible property centralized management program.”**

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Also, the corporation management should consider the indirect costs to the organization, including the initial administrative disruption to the parent company associated with the creation and implementation of the intangible property centralized management program.

In addition to the initial start-up costs, there may be continuing administrative costs associated with main-

taining the IPHC and the intangible property management program. These costs may include periodic legal advice (to maintain the form and substance of the centralized management program) and periodic transfer price analyses (to re-evaluate the appropriate intercompany license royalty rate).

One additional issue for the corporation considering an intangible property management program is an unexpected change in the value of the transferred intellectual property and the corresponding unexpected change in the intercompany license ALP royalty rate. After the program is implemented and the intellectual property is transferred, the intercompany license ALP royalty rate may change.

Such a royalty rate change may be due to unanticipated intangible property obsolescence or to unanticipated economic changes in the industry or in the operating business units. This is one of the reasons why some corporations re-evaluate their intercompany license royalty rate formula on a periodic basis. Such events could affect the cost/benefit considerations with regard to the intangible property centralized management program.

Before the corporation initiates the intangible property management program, it should carefully evaluate the expected costs and potential benefits of such a program. Competent legal counsel should be consulted during this evaluation phase.

Also, a preliminary fair market value estimate of the intangible property to be transferred may be prepared. This preliminary estimate of the initial (“buy-in” transfer price and IPHC intercompany license transfer price should be adequate for planning, evaluation, and decision making purposes.

Of course, a more rigorous fair market value valuation and intercompany license ALP royalty rate may be required in the actual implementation of the IPHC and the intangible property centralized management program.

## **SUMMARY AND CONCLUSION**

As with any strategic planning considerations, there are numerous pros and cons to the implementation of an IPHC and the associated intangible property centralized management program.

In terms of the pros, the corporation may enjoy increased internal control and external control over its intellectual property. The IPHC may implement a legal and commercial structure to investigate inbound and outbound licensing opportunities—or other intellectual property commercialization. And, as an incidental consideration, there may also be some state income tax benefits associated with the intangible property centralized management program.

In terms of the cons, the corporation may experience intangible property centralized management program implementation costs. Such costs may include the costs of an initial cost/benefit analysis, legal counsel fees, intangible property valuation and transfer price analysis fees, and the temporary organization disequilibrium associated with implementing the IPHC and associated transfers.

There may also be recurring costs associated with the periodic legal fees and intercompany license transfer price analysis fees. In particular, such fees may materialize if state taxing jurisdictions challenge the intercompany license ALP royalty formula.

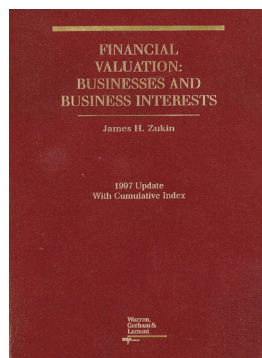
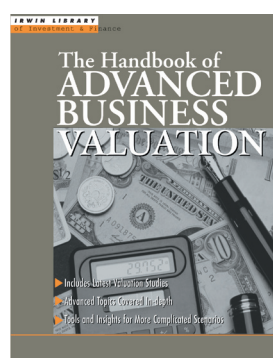
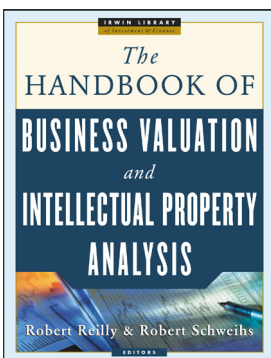
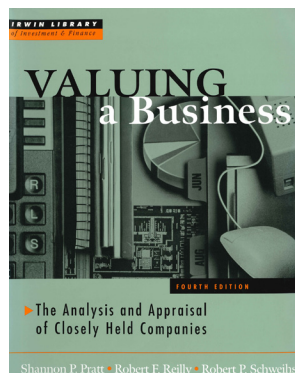
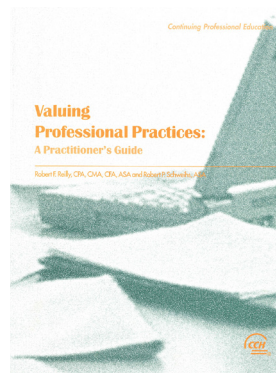
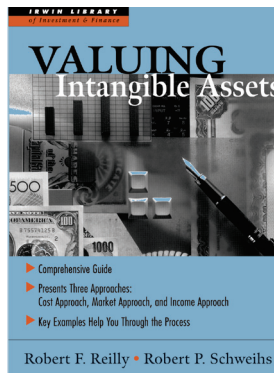
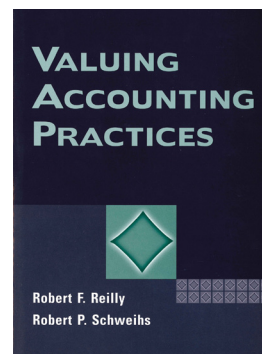
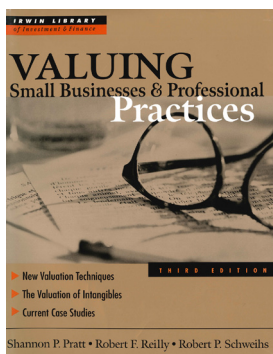
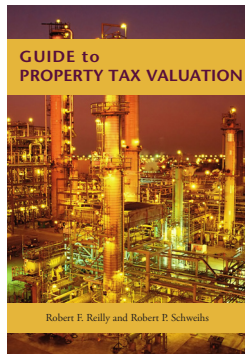
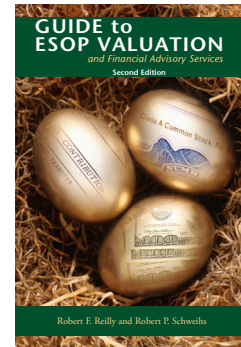
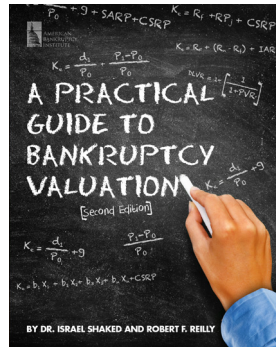
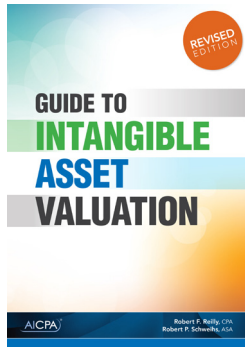
Lastly, there is the risk that the value—and the associated license ALP royalty—of the transferred intangible property may change over time. And, this risk is not always within the control of company management.

Multistate corporations in many industries could experience administrative, management, and commercialization benefits associated with an IPHC intangible property centralized management program. This observation is particularly true for multistate corporations that rely heavily on intellectual property (such as trademarks, trade names, computer software, patents, proprietary technology, chemical formulae, etc.) in their normal business operations.

Before an IPHC intangible property centralized management program is implemented, the corporation should obtain advice of intellectual property counsel. And, before such an IPHC intangible property centralized management program is implemented, the corporation should obtain the advice of an intellectual property valuation analyst and a transfer pricing analyst.



# Valuation Textbooks Authored by Robert Reilly and Robert Schweih



- \* Authored by Robert Reilly and Israel Shaked, Ph.D.
- \*\* Authored with Shannon Pratt
- \*\*\* Edited by Robert Reilly and Robert Schweih



**Willamette Management Associates**



## Practical Guidance in an Intangible Property Transfer Price Analysis

*When a multinational corporation develops and owns intangible property that is transferred to a controlled foreign subsidiary, the transferee should pay an arm's-length price ("ALP") for the transferred intangible property. Likewise, when the intercompany use of intangible property is licensed between a controlled foreign entity and a domestic taxpayer, the licensee should pay a fair ALP royalty to the licensor for the use of that intangible property. In addition, when a controlled participant enters into an intercompany cost sharing arrangement, the participant should buy in to the contributed intangible property at an ALP. The purpose of such a transfer price is to ensure that the appropriate amount of taxable income is recognized—and the appropriate amount of income tax is paid—in each national taxing jurisdiction. The intercompany transfer price should reflect the ALP that unrelated parties would agree to for the transfer or use of similar intangible property. For domestic taxpayers, the Treasury Regulations provide guidance on the methods to estimate the ALP in such situations. However, the transfer pricing analyst ("analyst") is likely to encounter special circumstances in each intercompany transfer engagement. This discussion addresses issues that the analyst may encounter when applying the procedural guidance provided by the Regulations to Internal Revenue Code Section 482. These Regulations encompass the determination of an ALP for the intercompany transfer of tangible property, intangible property, and services.*

*The original version of this discussion was published in the Spring 2012 issue of Insights under the title "Overcoming Obstacles in the Intellectual Property Transfer Price Analysis." Aaron M. Rotkowsky and Scott R. Miller were authors of the original discussion.*

### INTRODUCTION

This discussion describes common issues that a transfer pricing analyst ("analyst") may encounter when complying with the Regulations related to Internal Revenue Code Section 482. In particular, this discussion relates to the multinational company transfer of intangible property and/or the contribution of intangible property with respect to an intercompany cost sharing arrangement ("CSA").

The purpose of Section 482 is to ensure that a domestic taxpayer clearly reflects the income attrib-

utable to controlled party transactions. According to Regulation 1.482-1, the standard to be applied in every intercompany transfer is that of a third-party taxpayer dealing at arm's length with an uncontrolled (and unrelated) taxpayer.

According to Regulation 1.482-1, a controlled transaction meets the arm's-length standard if the results of the controlled transaction are consistent with the results that would have been realized if two uncontrolled (i.e., unrelated and independent) taxpayers had engaged in the same transaction under the same circumstances.

An intercompany transfer price is the price that one entity charges a related party for the transfer of—or the use of—the following:

1. Tangible property
2. Intangible property
3. Services

Regulation 1.482-3 provides guidance related to the methods that may be used to determine an ALP regarding the transfer of tangible property. Regulations 1.482-4, -5, and -6 provide guidance related to the methods that may be used to determine an ALP regarding the transfer of intangible property. And, Regulation 1.482-9 provides guidance related to the methods that may be used to determine an ALP related to the transfer of services.

In addition, Regulation 1.482-7 provides guidance related to the implementation of a CSA.

The intangible property transfer can be between a parent corporation and a subsidiary. Or, the intangible property transfer can be between two affiliated (brother/sister) controlled corporations.

Likewise, the U.S. domestic company could own the intangible property and the controlled foreign company could use the intellectual property (i.e., a hypothetical outbound license). Or, the controlled foreign company could own the intangible property and the domestic company could use it (i.e., a hypothetical inbound license).

This discussion focuses on the determination of a fair, arm's-length price ("ALP") royalty rate (i.e., transfer price expressed in terms of a percent of revenue). This ALP royalty rate should be the price that one unrelated party intangible property owner would charge an unrelated party intangible property operator to enter into a use license for the intangible property.

## THE ARM'S-LENGTH PRICE STANDARD

In this discussion, let's assume that the intangible property owner is the hypothetical licensor in the arm's-length license transaction. And, let's assume that the intangible property operator is the hypothetical licensee in the arm's-length license transaction.

The estimation of a fair, arm's-length transfer price is particularly important when two or more national taxing jurisdictions are involved—that is, when the intangible property is transferred between a controlled participant located in one country and a controlled participant located in a different country.

When the intangible property transfer involves a multinational taxpayer corporation, the determination of taxable income related to transfer price is of great interest to both the domestic taxing authority and the foreign taxing authority.

The U.S. Congress promulgated Section 482 to address the concern that a domestic taxpayer could allocate income (and avoid income taxes) by transferring property (tangible property or intangible property) to a foreign affiliate.

Likewise, the Internal Revenue Service (the "Service") may be concerned that a foreign taxpayer may underreport domestic income by not allocating sufficient income to the related U.S. taxpayer for the use of the domestic tangible property or intangible property.

The Section 482 Regulations address these concerns by providing methods for delivering the transfer price charged in the multinational transfer of tangible property, intangible property, or services.

The goal of the Section 482 Regulations is to determine the arm's-length transfer price that two unrelated parties would have negotiated for the exchange of the subject property or services. This transfer price is then applied to the subject intercompany transaction.

According to the Section 482 Regulations:

A controlled transaction meets the arm's length standard if the results of the transaction are consistent with the results that would have been realized if uncontrolled taxpayers had engaged in the same transaction under the same circumstances. . . .<sup>1</sup>

## THE SECTION 482 REGULATIONS INTANGIBLE PROPERTY TRANSFER PRICE METHODS

To determine the ALP related to certain intercompany transfers of intangible property, the Section 482 Regulations list three specified methods and one unspecified method.

The specified methods are as follows:

1. The comparable uncontrolled transaction ("CUT") method, provided in Regulation 1.482-4
2. The comparable profits method, provided in Regulation 1.482-5
3. The profit split method, provided in Regulation 1.482-6

An unspecified method is any transfer price method not specified in the Section 482 Regulations. The unspecified methods are discussed in Regulation 1.482-4. An unspecified method “should take into account the general principle that uncontrolled taxpayers evaluate the terms of a transaction by considering the realistic alternatives to that transaction, and only enter into a particular transaction if none of the alternatives is preferable to it.”<sup>2</sup>

## THE BEST METHOD RULE

All of the intercompany transfer price methods listed in the Section 482 Regulations should be considered by the analyst in the estimation of the ALP.

However, Regulation 1.482-1 requires that the “best method” be used to determine the arm’s-length price for each property (or service) included in an intercompany transaction.

To determine the best method, the analyst should consider the following factors:

1. The degree of comparability between the subject controlled transaction and any selected uncontrolled transactions
2. The quality of the data and the assumptions used in the transfer price analysis.

This discussion addresses some of the issues that may arise, and the potential solutions to those issues, when the analyst performs a transfer price analysis with regard to the intercompany transfer of intangible property.

To address these issues, first this discussion presents guidance from the Regulations.

Second, this discussion presents a simplified example that is based on an illustrative intercompany transfer price analysis engagement.

The general transfer price issues presented here relate to an actual intercompany transfer price analysis engagement. However, the specific information concerning the illustrative example has been altered for both presentation simplification and client confidentiality purposes.

## THE CUT METHOD AND THE COMPARABLE PROFITS METHOD

This discussion focuses on the CUT method and the comparable profits method. This discussion addresses issues that analysts may encounter in the application of the CUT method, including the com-

parability of CUTs and considerations when applying the same CUTs to multiple countries.

This discussion also addresses issues that an analyst may encounter in the application of the comparable profits method, including the following:

1. Selecting the appropriate tested parties
2. Adjusting the tested parties to more accurately represent the impact of the transferred intangible property
3. Selecting appropriate uncontrolled comparable companies
4. Selecting an appropriate profit level indicator
5. Making adjustments to calculate an intangible property intercompany transfer royalty rate

## ISSUE NUMBER 1—COMPARABILITY OF THE CUTs

According to the Section 482 Regulations, “The comparable uncontrolled transaction method evaluates whether the amount charged for a controlled transfer of intangible property was arm’s length by reference to the amount charged in a comparable uncontrolled transaction.”<sup>3</sup>

The CUT method is a common intangible property transfer price measurement method. This is because the CUT method:

1. is specifically listed in the Section 482 Regulations and
2. is based on actual sale or license transactions involving comparable intangible property.

The primary procedures that the analyst may use in applying the CUT method are summarized as follows:

1. Search for and select arm’s-length unrelated party sales or licenses of comparable intangible property
2. Verify that the intangible property CUTs were conducted under comparable circumstances
3. Analyze the CUT data and select a subject intangible-property-specific royalty rate from the empirical pricing data indicated by the intangible property comparable uncontrolled transfer transactions

The following discussion presents (1) Section 482 Regulations guidance related to the selection of



CUTs and (2) practical considerations for the analyst related to the CUT selection process.

These practical considerations may help the analyst to determine:

1. which CUTs are comparable and should be included in the CUT method analysis and
2. if the CUT method is the best method to use in a particular transfer price analysis.

## Guidance from the Section 482 Regulations

Selecting CUTs is a challenging but important procedure in the application of the CUT method. This CUT selection procedure should accomplish the following objectives:

1. Help to determine if the CUT method is the best method in the subject intangible property transfer price analysis
2. Affect the subject intangible-property-specific royalty rate concluded from this method

The Section 482 Regulations list factors that should be considered when selecting CUTs. According to the Section 482 Regulations, “Such factors include the following—(i) Functions; (ii) Contractual terms; (iii) Risks; (iv) Economic conditions; and (v) Property or services.”<sup>4</sup>

Within factor (i), the functional analysis, the regulations inform the analyst to consider the following factors:

(A) Research and development; (B) Product design and engineering; (C) Manufacturing, production and process engineering; (D) Product fabrication, extraction, and assembly; (E) Purchasing and materials management; (F) Marketing and distribution functions, including inventory management, warranty administration, and advertising activities; (G) Transportation and warehousing; and (H) Managerial, legal, accounting and finance, credit and collection, training and personnel management services.<sup>5</sup>



Within factor (ii), contractual terms, the regulations inform the analyst to consider the following factors:

(1) The form of consideration charged or paid; (2) Sales or purchase volume; (3) The scope and terms of warranties provided; (4) Rights to updates, revisions or modifications; (5) The duration of relevant license, contract or other agreements, and termination or renegotiation rights; (6) Collateral transactions or ongoing business relationships between the buyer and the seller, including arrangements for the provision of ancillary or subsidiary services; and (7) Extensions of credit and payment terms.<sup>6</sup>

And, finally, according to the regulations:

In order to be considered comparable to a controlled transaction, an uncontrolled transaction need not be identical to the controlled transaction, but must be sufficiently similar that it provides a reliable measure of an arm's length result.<sup>7</sup>

## Analyst Practical Guidance—An Illustrative Example

Each of the factors listed in the prior section provides useful guidance regarding the selection of CUTs in the application of the CUT method. The factors presented are both well-reasoned and well supported.



However, there are at least three procedural issues that the analyst sometimes faces when selecting CUTs as part of the application of the CUT method.

These three procedural issues are summarized as follows:

1. How does the analyst prioritize the many factors listed in the prior section (i.e., is the product design and engineering within the functional analysis more important than the rights to updates, revisions, or modifications in the analysis of contractual terms)?
2. What does the analyst do when information regarding many of the factors listed in the prior section is not available for the CUTs?
3. How comparable do the CUTs and the subject intangible property have to be in order for the CUT method to produce a meaningful transfer price conclusion?

The following discussion presents a simplified illustrative example to address these three procedural issues. Although the names and data from the actual engagement have been altered, this illustrative example is based on a recent transfer price engagement.

In this illustrative example, let's call the subject taxpayer Multinational Corporation ("MNC"). Let's assume that MNC is a U.S.-based multinational company. MNC manufactures widgets that are used in the manufacture and remodeling of both residential and commercial buildings.

### The Wonderful Widget Trademark

The subject intangible property is the "Wonderful Widget" trademark. The trademark is owned by the U.S. parent corporation. The trademark is used by controlled subsidiaries in various foreign countries.

The subject transaction is an intangible property use license agreement entered into between (1) the domestic MNC and (2) certain of its foreign subsidiaries. The license agreement grants the foreign subsidiaries the right to use the Wonderful Widget trademark in an exclusive territory.

The intercompany license royalty rate paid by each foreign subsidiary to the U.S. parent corporation will be calculated based on a percent of the Wonderful Widget product sales in each specified foreign territory.

In order to select CUTs for the CUT method, the analyst searched the following intellectual property license agreement automated databases:

1. The RoyaltySource Royalty Rate database<sup>8</sup>
2. The ktMINE Royalty Rates and Records database<sup>9</sup>

The analyst searched each database source, by keyword and by Standard Industrial Classification ("SIC") code, that is, standard industrial classification.

In total, these database searches provided over 100 potential CUT trademark licenses. To further refine the sample of selected trademark license agreements/transactions, the analyst focused on two basic comparability factors:

1. The potential CUT licensed product(s)
2. The potential CUT license contract terms

According to an article published in the journal *Valuation Strategies*:

The general standards of comparability govern the selection of a CUT. However the regulations note that two comparability factors are particularly relevant to the use of the CUT method. First, the proposed comparable intangible asset should be the same as, or comparable to, the subject intangible asset. Second, comparability will depend on the contractual terms of the transfer and the economic conditions under which the transfer takes place.<sup>10</sup>

### The Primary CUT Selection/Rejection Criteria

In order to focus the CUT search on the transferred intangible property and on the contract terms—and to exclude transactions otherwise considered unsuitable for use in the CUT method—the analyst excluded license agreements/transactions that met one or more of the following criteria:

1. The licensed intangible property was significantly different than the intangible property involved in the subject intercompany transaction
2. The licensee did not manufacture products
3. The license transactions were between related parties
4. The license agreement pertained to a franchise, technology, or software (i.e., not to a product trademark)
5. The date of the license transaction was too old compared to the date of the Wonderful Widget trademark license

6. The potential CUT license transaction documentation lacked sufficient information

It is noteworthy that this list of CUT selection/rejection criteria includes some overlap (but not a complete overlap) with the list of comparability factors presented in the prior section of this discussion.

In this case study example, the analyst concluded that the factors in the prior bulleted list were the most important factors at this stage in the potential CUT selection/rejection process.

After considering these preliminary factors, the analyst reduced the list of potential CUT trademark license agreements from over 100 licenses to a more manageable number of 12 potential CUTs.

### Additional CUT Selection/Rejection Criteria

Next, the analyst considered each of the following additional criteria to further refine the CUT selection/rejection process:

1. Products sold (e.g., concrete blocks, heavy machinery, etc.)
2. Product distribution (e.g., wholesale or retail)
3. License term (e.g., license start date, license end date, and renewal options)
4. Exclusivity (e.g., exclusive or nonexclusive)
5. Territoriality (e.g., North America or world)
6. Royalty rate terms (e.g., percent of total sales or percent of trademarked product sales)
7. Other payments (e.g., reimbursement of advertising expenses)
8. Profit potential from trademarked products (e.g., operating profit margin from sales of trademarked products)

The consideration of these additional selection/rejection screening criteria reduced the number of potential CUT license transactions from 12 licenses to 4 licenses.

For each of these four selected CUT license transactions, the analyst reviewed the SEC documents filed by the licensor and/or licensee. The analyst reviewed each actual license agreement in order to obtain more detailed information concerning the trademark licensing transaction.



The analyst concluded that the methodology could account for any remaining differences between the four selected CUTs and the subject intangible property during the final selection of the intangible-property-specific royalty rate.

That is, rather than exclude a potential CUT license based on differences between the potential CUT and the subject intangible property, the analyst would account for these differences in the selection of the intangible-property-specific royalty rate.

### The Selected CUT Licenses

Based on a review of the publicly available documents concerning the selected comparable trademark licenses, the analyst developed the following observations about the selected CUTs:

1. All of the selected CUT licenses were still effective as of the transfer price estimation date.
2. All of the selected CUT licenses involved companies that manufactured durable goods. None of the CUTs involved a widget manufacturer.
3. CUT license company #1 (here called "comp #1") was primarily a service company. Although the company was primarily a service company, comp #1 manufactured home remodeling products sold under the licensed trademark. Comp #2, comp #3, and comp #4 all were primarily manufacturing companies.
4. The comp #1 and comp #2 license agreements contained a minimum royalty payment. The comp #1 license agreement

required annual contributions to the licensor company for advertising. Also, there was insufficient detail regarding the other two CUT licenses to determine if the licensee agreed to make payments to the licensor in addition to the agreed upon royalties.

All else being equal, these net sales guarantees generally allow for a lower net sales royalty rate.

5. The royalty rate specified in the comp #4 license agreement was based on a percent of the licensee's total sales (and not only the sales related to the licensed products).

All else being equal, this formula allows for a lower net sales royalty rate.

6. Several of the selected CUT licenses provide for licensee exclusivity in multi-country territories.

All else being equal, the exclusivity of a larger territory allows for a higher net sales royalty rate.

7. The operating profit margin of the licensee during the year of the CUT was negative for comp #1 and comp #2. Comp #3 and comp #4 reported a last year operating profit margin of 4.1 percent and 8.4 percent, respectively.

A higher profit margin implies a higher net sales royalty rate, all other factors being equal.

8. The CUT license net sales royalty rates ranged from 0.75 percent to 5.0 percent. The comp #4 CUT had a 0.75 percent net sales royalty rate; the comp #1 CUT and comp #2 CUT each had a 3 percent net sales royalty rate; and the comp #3 CUT had a 5 percent net sales royalty rate.
9. The comp #4 CUT license royalty rate (0.75 percent) may have been negotiated downward. This is because the royalty rate was based on total product sales—and not only on the product sales affected by the licensed trademark.

However, the royalty rate on this transaction may have also been negotiated upward. This is because the licensee was granted worldwide exclusivity.

10. The comp #1 CUT license royalty rate (3 percent) and comp #2 CUT license royalty rate (3 percent) may have been negotiated downward.

This is because these licenses include other compensation in addition to the royalty rate.

11. The comp #3 CUT license net sales royalty rate of 5 percent was for world exclusivity.

This royalty rate may have been less than 5 percent if the licensee territory was smaller.

The analyst concluded that the selected CUT licenses are not perfectly comparable to the subject intangible property. For example, there are differences between the license territory, exclusivity, and the calculation of the royalty payment.

## Comparability Considerations

There will always be differences between the CUT licenses and the subject taxpayer intangible property transfer transaction. This is because, in every license agreement, the licensed intangible property is unique (hence, the transaction), the licensor is unique, and the licensee is unique.

However, such differences do not preclude the use of the CUT method. In our illustrative example, the analyst concluded that (in spite of the differences between the selected CUT licenses and the subject taxpayer transaction), the CUT method was still appropriate.

The above discussion provided a practical example that illustrated the following:

1. The selection and rejection of CUT licenses
2. The factors that may be prioritized over other factors in the CUT selection process
3. Whether or not differences between the selected CUT licenses and the subject taxpayer transaction preclude the use of the CUT method

## ISSUE NUMBER 2— CONSIDERATION OF MULTIPLE REGIONS

The analyst may be retained by a multinational corporation to perform intercompany transfer price analyses related to the license of intangible property between entities that are both related to the multinational corporation.

In these engagements, one entity (e.g., the parent company licensor) typically licenses the intangible property to multiple related entities in different regions (e.g., the foreign subsidiary licensees).

To continue with the above illustrative example, let's assume that MNC licenses the Wonderful Widget trademark to its foreign subsidiaries located in the following countries:

1. Mexico
2. The United Kingdom
3. Poland

Let's further assume that (1) the analyst has determined that the transfer price measurement best method is the CUT method and (2) none of the selected CUT licensees operate in the same region that the foreign subsidiaries operate in.

In situations such as these, the analyst should account for differences between (1) the regions of the selected CUT licenses and (2) the regions of the foreign subsidiaries.

With regard to a multiple region analysis, the analyst may consider questions such as the following:

1. Should the same CUT licenses be used for each region?
2. Should the selected royalty rate be the same for each region?
3. If the royalty rate is different for each region, how should the royalty rate differ between regions?

This discussion suggests several practical answers to these analyst questions, using the above illustrative example.

## Professional Guidance from the Section 482 Regulations

As discussed in the prior section, the Section 482 Regulations list many different factors that may be considered when selecting a CUT for the application of the CUT method.

The Section 482 Regulations provides guidance as to what factors may be considered when adjusting for differences between (1) controlled transactions and (2) the selected uncontrolled transactions.

These comparability adjustment factors listed in the regulations include the following:

- (1) Quality of the product; (2) Contractual terms (e.g., scope and terms of warranties provided, sales or purchase volume, credit terms, transport terms); (3) Level of the market (i.e., wholesale, retail, etc.); (4) Geographic market in which the transaction takes place; (5) Date of the transaction; (6) intangible property associated with the sale; (7) Foreign currency risks; and (8) Alternatives realistically available to the buyer and seller.<sup>11</sup>

The Section 482 Regulation factors listed in the CUT selection discussion also apply to adjusting for differences between (1) the subject controlled transaction and (2) the uncontrolled transactions.

## Analyst Practical Guidance—An Illustrative Example

In our continuing illustrative example, the analyst considered several of the factors discussed above in the CUT search process. That is, the analyst considered these factors in the royalty rate selection process. For example, the analyst excluded license transactions that were considered too stale.

The Section 482 Regulations suggest that data available as of the transaction date should be considered in the royalty rate selection procedure.

The analyst may apply discretion regarding (1) how to select the CUTs and (2) how to select a transfer price (e.g., a royalty rate) for the subject transaction based on the guideline CUT data.

The specific facts and circumstances surrounding the subject taxpayer transaction and the selected CUTs should be considered in every transfer price analysis.

## Royalty Rate Selection Procedures

In this illustrative example, the analyst performed the following procedures to select a royalty rate applicable to each region:

1. The analyst assessed the local economy in the foreign subsidiaries (e.g., were there unique political risks, or was the credit rating of each foreign subsidiary region similar?).
2. The analyst considered the home building and remodeling industry in the countries of the foreign subsidiaries (e.g., was the home building market stronger or weaker in one region compared to the others?).
3. The analyst considered the historical and projected financial statements of the foreign subsidiaries (e.g., was one region especially profitable compared to the other regions, and why?).
4. The analyst considered the differences between the Wonderful Widget trademark use in each foreign subsidiary region (e.g., how long had the trademark been used in each region, and how was the trademark perceived by customers in each region?).
5. The analyst considered other factors that were relevant (e.g., what was the existence and the nature of related transactions, and



what was the market share of the trademarked products in each region?).

6. The analyst also considered the factors that were previously analyzed as part of the CUT license search process.

### Trademark Royalty Rate

In our illustrative example, the analyst observed that the biggest difference between the regions was in the Mexico region. In that region, the trademark was widely used; it was widely recognized by consumers; and the Mexico subsidiary was the most profitable of the three foreign subsidiaries.

Conversely, the Wonderful Widget trademark was one of several construction and remodeling-related trademarks that were used in the United Kingdom and in Poland.

Finally, the analyst noted that the U.K. and Poland subsidiaries were only marginally profitable.

Based on these considerations, the analyst selected a royalty rate for the Mexico subsidiary that was greater than the royalty rate selected for the U.K. subsidiary and for the Poland subsidiary.

The analyst selected the same royalty rate for the U.K. subsidiary and for the Poland subsidiary.

This discussion provides a practical example regarding the selection of a transfer price for multiple regions using the same CUT license data. And, specifically, this discussion lists several factors that the analyst can consider when applying the same CUT licenses to multiple regions.

## ISSUE NUMBER 3—ISSUES IN APPLYING THE COMPARABLE PROFITS METHOD

As described in the introduction, the Section 482 Regulations allow three specified methods and one unspecified method for calculating the arm's-length transfer price for intangible property.

The intangible property transfer price methods are the following:

1. The CUT method—which was addressed earlier in this discussion
2. The profit split method—which allocates the relative value of each controlled party's contribution to that of the combined operating profit
3. The comparable profits method—which uses comparable company profitability measures to determine an arm's-length royalty rate to apply to the subject transaction

4. The unspecified method—any method not specified in the Section 482 Regulations that follows the principle that uncontrolled taxpayers would evaluate the terms of a transaction by considering realistic alternatives

### Best Method Selection Issues

In certain cases, the analyst may not be able to effectively apply a transfer price method. For example, the analyst may determine that there are insufficient data to apply the CUT method.

When the subject intangible property is in a unique industry or involves a company with unique characteristics, the analyst may find it difficult to select comparable intangible property sale or license transactions.

When performing the profit split method, the analyst evaluates the allocation of the combined operating profit attributable to the subject intangible property.

This transfer price method may not produce meaningful results if:

1. there is insufficient information to accurately allocate profit margin to specific intangible property or
2. the combined company operates in an industry where profit margins are generally low in absolute terms.

If either of these situations exists, it may be difficult to allocate the operating profit margin to each area of the company contributing to business activity, including the subject intangible property.

### Considerations in the Application of the Comparable Profits Method

When the CUT method and the profit split method do not produce meaningful results, the analyst may rely on the comparable profits method. Unlike the CUT method, the comparable profits method does not require the analysis of comparable sale or license transactions.

The comparable profits method focuses on comparable public companies, with data that are generally publicly available.

Additionally, the comparable profits method relies on publicly traded companies that operate in the same or a similar industry as the subject company.

Relying on the comparable profits method may allow the analyst to produce a meaningful arm's-

length price for the subject transaction, even when the profit margin of the subject controlled company is minimal.

This discussion addresses the procedures that the analyst may use in the application of the comparable profits method. Additionally, this discussion addresses practical issues and solutions that the analyst may encounter in the application of the comparable profits method in a transfer price analysis.

## Professional Guidance from the Section 482 Regulations

The Section 482 Regulations describe the comparable profits method. According to the Section 482 Regulations:

The comparable profits method evaluates whether the amount charged in a controlled transaction is arm's length based on objective measures of profitability (profit level indicators) derived from uncontrolled taxpayers that engage in similar business activities under similar circumstances.<sup>12</sup>

## Comparable Profits Method Application Procedures

There are four general categories of procedures involved in the application of the comparable profits method for estimating an intangible property transfer price royalty rate:

1. Select one of the companies in the intangible property transfer transaction (i.e., the "tested party").
2. Identify an uncontrolled company or group of companies that is/are comparable to the tested party.
3. Match the tested party's operating profits to that of the comparable uncontrolled companies, by applying a profit level indicator from the comparable, uncontrolled companies to the tested party.
4. Calculate the intangible property inter-company transfer price or royalty rate that produces this level of operating profit.

The Section 482 Regulations provide the guidance that, "the tested party will be the participant in the controlled transaction whose operating profit attributable to the controlled transactions can be verified using the most reliable data and requiring the fewest and most reliable adjustments."<sup>13</sup>

The Section 482 Regulations further state that, "to the extent possible, profit level indicators should

be applied solely to the tested party's financial data that is related to controlled transactions."<sup>14</sup>

## Analyst Practical Guidance—An Illustrative Example

In this illustrative example, let's consider the same taxpayer company (i.e., MNC and its subsidiaries) and the same intangible property (i.e., the Wonderful Widget trademark).

However, let's now assume that both the CUT method and the profit split method were rejected for various reasons.

In this example, the analyst considered the comparable profits method to estimate the transfer price intangible property transfer price.

### Selecting the Tested Party

As explained in a prior section, the subject transaction is a license agreement between MNC and certain foreign subsidiaries. MNC grants the foreign subsidiaries the right to use the Wonderful Widget trademark in an exclusive territory.

The license royalty rate transfer price paid by the foreign subsidiaries should be calculated based on a percent of the Wonderful Widget product sales.

In the application of the comparable profits method, the analyst selected the foreign subsidiaries as the tested parties. The foreign subsidiaries engage in activities that are less complex and of a narrower scope than MNC.

Additionally, the analyst calculated an arm's-length intangible property royalty rate for multiple foreign subsidiaries of MNC. Selecting each of the foreign subsidiaries as the tested parties allowed the analyst to complete this task.

### Adjusting the Tested Party

Let's expand the illustrative example facts and circumstances. And, let's assume that one of the foreign subsidiaries of MNC was Eurosub.

Further, let's assume that Eurosub owns a foreign subsidiary with significant operational deficiencies (let's call this subsidiary Greecesub of Europe).

Let's further assume that Greecesub of Europe:

1. had structural and operational deficiencies that negatively affected the profitability of Eurosub, independent of the use of the taxpayer intangible property, and
2. did not enjoy the same brand recognition as the majority of Eurosub, and therefore did not reflect the profit potential relating to the taxpayer intangible property.

Although Greecesub of Europe accounted for less than 20 percent of the Eurosub operations, Greecesub had a material impact on the Eurosub profitability.

Therefore, the analyst eliminated the Greecesub of Europe financial results from the Eurosub consolidated financial results.

Prior to making this financial statement adjustment, the analyst performed the following normalization procedures:

1. The analyst normalized the financial data of both Greecesub of Europe and Eurosub.
2. The analyst eliminated the results of Greecesub of Europe from the results of Eurosub on a line-by-line basis.

This financial statement normalization adjustment resulted in a more accurate representation of the profitability relating to the Eurosub use of the taxpayer intangible property.

### Selecting a Group of Uncontrolled Companies

This selection procedure is one of the more difficult procedures in the application of the comparable profits method. However, the selection process may yield more results than a search for CUT license pricing data.

In the search for comparable publicly traded companies for use as uncontrolled comparable companies, the analyst searched the following databases:

1. the Capital IQ database<sup>15</sup>
2. the Mergent Online database<sup>16</sup>

The analyst searched these capital market databases based on the following factors:

1. The industry in which the company operates
2. The geographic location of the company
3. The annual revenue of the company
4. Specific keywords common to the tested party

The initial search generated a list of over 40 publicly traded companies. The rules for comparability used in the selection of CUTs outlined in Regulation 1.482-1(d) also apply to the selection of comparable uncontrolled companies.

Therefore, among other factors, the analyst considered the following:

1. The risks the company is exposed to

2. The economic conditions in which the company operates
3. The services that the company provides

Based on consideration of these and other criteria, the analyst selected five comparable publicly traded companies.

Each of the five selected comparable publicly traded companies:

1. had significant operations in the same geographic area as the tested party,
2. operated in the construction and home building and remodeling industry, and
3. operated at a reasonable profit level for the industry in the most recent fiscal year.

Additionally, the analyst was able to find sufficiently comparable financial data going back five years for each of the selected comparable publicly traded companies.

### Selecting the Appropriate Profit Level Indicator

In this analysis procedure, the analyst determined a profit level indicator (“PLI”) from the uncontrolled companies to apply to the tested parties. In the application of the comparable profits method, a PLI measures profits in terms of either resources employed or costs incurred.

According to the Section 482 Regulations,<sup>17</sup> common comparable profits method profit level indicators are as follows:

1. The rate of return on capital employed (“ROCE”)
2. The ratio of operating profit to sales
3. The ratio of gross profit to operating expenses (the so-called Berry Ratio)

The choice of PLI to rely on varies based on the company being considered. If the subject entity uses significant assets in its operations, it may be appropriate to use ROCE as a metric. Income statement measures such as operating income and costs may be more appropriate for an entity that does not rely on a significant level of assets for operations.

The reliability and applicability of available data with respect to the uncontrolled companies is another factor to consider in determining which PLI to rely on.

Although the foreign subsidiaries of MNC manufacture Wonderful Widgets, the analyst determined that the use of the operating profit to sales ratio was an appropriate PLI to use.

The analyst selected this PLI based on the following factors:

1. The information available for the controlled and uncontrolled companies
2. The complexity of balance sheet normalization adjustments that should be made to ensure ROCE comparability between the controlled and uncontrolled companies
3. The fact that the intercompany license royalty rate paid by the foreign subsidiaries to MNC is calculated based on a percent of the Wonderful Widget product sales

For this illustrative example, let's assume that the two tested parties are Eurosub and Polandsub (both foreign operating subsidiaries of MNC that enjoy the benefit of the taxpayer intangible property).

### Estimating the Intangible Property Intercompany Royalty Rate

The analyst relied on the same group of uncontrolled comparable companies for both Eurosub and Polandsub, for the following reasons:

1. There were a limited number of sufficiently comparable uncontrolled companies in each of the tested parties' specific market areas.
2. The economic and political environments in which the two subsidiaries operate are comparable.
3. The operations of the two subsidiaries are similar.

The respective economic environments in which Eurosub and Polandsub operate did have some differences, which are addressed below.

According to the Section 482 Regulations, "the profit level indicators should be derived from a sufficient number of years of data to reasonably measure returns that accrue to uncontrolled comparables."<sup>18</sup>

The tested parties (i.e., Eurosub and Polandsub) operate in the cyclical construction and remodeling industry. Therefore, the analyst relied on a five-year average operating profit margin as the PLI (opposed to the latest 12 months operating profit margin, three-year average operating profit margin, or some other time period).

After calculating the five-year average operating profit margin for the five uncontrolled companies, the analyst calculated an interquartile range.

Exhibit 1 presents the following financial data:

### Exhibit 1 Controlled Company and Uncontrolled Companies Operating Profit Margins

| Five-Year Average Profitability<br>(Operating Profit to Revenue) |      |
|--|------|
| Uncontrolled Company A   | 0.1% |
| Uncontrolled Company B   | 2.5% |
| Uncontrolled Company C   | 2.9% |
| Uncontrolled Company D   | 3.7% |
| Uncontrolled Company E   | 4.1% |
| Low  | 0.1% |
| 1st Quartile   | 2.5% |
| Median   | 2.9% |
| 3rd Quartile   | 3.7% |
| High   | 4.1% |
| Eurosub  | 5.3% |
| Polandsub  | 4.3% |

1. The operating profit margins of the uncontrolled companies
2. The uncontrolled company interquartile range
3. The operating profit margin of the tested parties.

The operating profit margins of both tested parties were greater than the upper limit of the interquartile range.

However, the Eurosub operating profit margin (after adjustment for an underperforming and incomparable subsidiary) was greater than the Polandsub operating profit margin.

First, the analyst determined that both of the tested parties warranted a royalty rate for the right to use the taxpayer intangible property. Second, the analyst further compared the tested parties to the uncontrolled companies.

### Comparability Considerations

Of the five uncontrolled companies, the analyst determined that the political, economic, and overall risk environment in which Eurosub operates most closely matched the environment in which Uncontrolled Company D and Uncontrolled Company E operate.



The countries in which Uncontrolled Company D and Uncontrolled Company E conduct the majority of operations were more similar to the Eurosub market area than the other uncontrolled company market areas in terms of the following:

1. Projected GDP growth
2. Housing prices
3. Population growth
4. Government bond ratings

Alternatively, the analyst determined that the political, economic, and overall risk environment that Polandsub operates in most closely matched the environment that Uncontrolled Company B and Uncontrolled Company C operate in.

The countries in which Uncontrolled Company B and Uncontrolled Company C conduct the majority of operations were more similar to the Polandsub market area than the other uncontrolled company market areas. This conclusion was based on the factors listed previously.

The analyst compared the operating profit margin of Eurosub to the median operating profit margin of Uncontrolled Company D and Uncontrolled Company E to determine a royalty rate appropriate for the Eurosub use of the taxpayer intangible property.

The analyst compared the Polandsub operating profit margin to the median operating profit margin of Uncontrolled Company B and Uncontrolled Company C—in order to determine a royalty rate appropriate for the Polandsub use of the taxpayer intangible property.

### Selecting the Fair Arm's-Length Price Royalty Rates

As presented in Exhibit 2, the analyst then selected the fair ALP royalty rates based on the difference between:

1. the operating profit margins of the tested parties and
2. a normal level of industry profitability for companies that do not enjoy the right to use the taxpayer intangible property (i.e., the most comparable uncontrolled companies).

The royalty rates estimated for Eurosub and Polandsub were within a close range to each other.

Additionally, Eurosub and Polandsub used the taxpayer intangible property to a similar degree and benefitted from a similar level of brand recognition relating to the taxpayer intangible property.

Therefore, the analyst selected an ALP license royalty rate for both Eurosub and Polandsub of 1.5 percent.

## Comparable Profits Method Summary

This illustrative example presented one example of the application of the comparable profits method in a intercompany transfer price analysis. Because each application of the comparable profits method will have unique circumstances, and unique issues to overcome, this discussion addressed some of the practical issues that the analyst may encounter.

These comparable profits method application issues include the following:

1. Adjustments to a tested party that did not originally reflect the profitability of the taxpayer intangible property
2. Selection of the appropriate comparable companies from a limited group
3. Selection of a PLI not necessarily typical to the subject company type
4. Adjustments to the PLI in order to capture differences between controlled and uncontrolled companies.

## SUMMARY AND CONCLUSION

When an analyst is asked to estimate the fair, arm's-length price for the intercompany transfer of taxpayer intangible property, that analyst will consider the professional guidance provided in the Section 482 Regulations.

As stated in the introduction, the Section 482 Regulations guidance provide general rules to calculate the ALP transfer prices related to the intercompany transfer of tangible property, intangible property, and services transfers.

Of course, no two transfer price analyses are alike. And, the illustrative examples provided in the Section 482 Regulations will almost certainly differ from the subject taxpayer transaction.

In the illustrative examples described above, the discussion focused on situations where the following statements were true:

1. There were imperfect CUTs.
2. The subject trademark was licensed from the parent company to multiple foreign subsidiaries.
3. Of the three specified methods, there were only sufficient data available to apply the comparable profits method.

This discussion addressed these practical issues by:

1. referencing the Section 482 Regulations guidance and
2. providing an illustrative example that was based on an actual multinational taxpayer company fact set.

This discussion focused on the above-listed three practical application issues for the following reasons:

1. These issues are common in intercompany transfer pricing analyses.
2. The proper consideration of these issues requires analyst judgment beyond what may be interpreted from the text of the Section 482 Regulations.

These illustrative examples provide practical guidance to resolve specific problems that an analyst may encounter in a transfer price analysis. Moreover, even in situations where an issue is not listed in the Section 482 Regulations and is not described herein, the analyst can use the practical guidance presented in this discussion to help address the particular issue.

For example, the analyst can apply certain practical guidance described in the “Issue Number 3—Issues in Applying the Comparable Profits Method” section to the selection of comparable publicly traded companies in the application of the profit split method.

The guidance in the Section 482 Regulations—and in this discussion—cannot address every issue that the analyst will encounter in a transfer price analysis. A credible and persuasive transfer price analysis will be the result of the analyst carefully studying the Section 482 Regulations. And, more importantly, a credible and persuasive transfer price analysis will result from the analyst making sound judgments in the application of the Section 482 Regulations guidance to the subject analysis.

#### Notes:

1. Treas. Reg. § 1.482-1(b)(1).
2. Treas. Reg. § 1.482-3(e)(1).
3. Treas. Reg. § 1.482-4(c).
4. Treas. Reg. § 1.482-1(d)(1).
5. Treas. Reg. § 1.482-1(d)(3)(i).
6. Treas. Reg. § 1.482-1(d)(3)(i).
7. Treas. Reg. § 1.482-4(d)(2).
8. The RoyaltySource Royalty Rate database is comprised of royalty rate information from arm’s-length license transactions that have occurred

## Exhibit 2 Eurosub Operating Profit Margin Spread

| Five-Year Average Profitability<br>(Operating Profit to Revenue) |      |
|--|------|
| Uncontrolled Company A   | 0.1% |
| Uncontrolled Company B   | 2.5% |
| Uncontrolled Company C   | 2.9% |
| Uncontrolled Company D   | 3.7% |
| Uncontrolled Company E   | 4.1% |
| Overall Median   | 2.9% |
| Company D and Company E Median                                   | 3.9% |
| Company B and Company C Median                                   | 2.7% |
| Eurosub  | 5.3% |
| Polandsub  | 4.3% |
| Excess Eurosub Operating Profit [a]                              | 1.4% |
| Excess Polandsub Operating Profit [b]                            | 1.6% |

#### Notes:

- [a] Based on the difference between (1) the Eurosub operating profit margin and (2) the Company D and Company E median operating profit margin.
- [b] Based on the difference between (1) the Polandsub operating profit margin and (2) the Company B and Company C median operating profit margin.

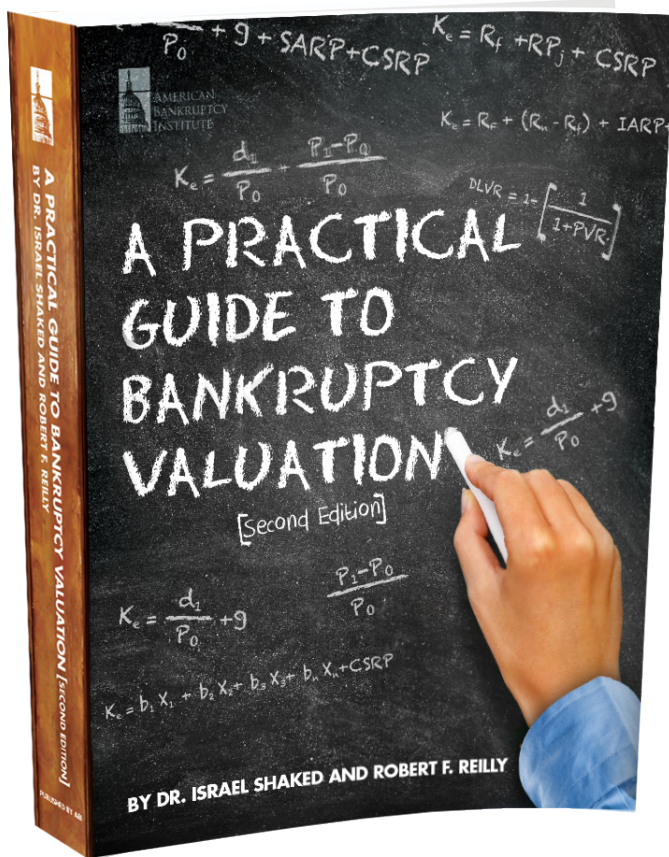
over the past 25 years. The license transaction data are gathered by AUS Consultants.

9. The ktMINE Royalty Rates and Records database consists of over 30,000 royalty rate transactions.
10. Robert F. Reilly, “Intercompany Transfer Price Analysis in Business Valuations,” *Valuation Strategies* (September/October 2004): 17.
11. Treas. Reg. § 1.482-3(b)(2)(ii).
12. Treas. Reg. § 1.482-5(a).
13. Treas. Reg. § 1.482-5(2)(i).
14. Treas. Reg. § 1.482-5(b).
15. Capital IQ contains data on nearly all publicly traded companies, as well as on nearly 2 million private companies.
16. Mergent Online contains data on active and inactive U.S. companies. The database also covers 95 percent of foreign public companies.
17. Treas. Reg. § 1.482-5(4)(i).
18. Treas. Reg. § 1.482-5(b)(4).

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Interspersed with helpful charts and hypothetical examples, this manual describes the generally accepted approaches for valuing the assets and securities of a financially troubled business. It also provides professional guidance to troubled-company managers, debt-holders and other creditors, equity-holders and investors, bankruptcy counsel, juridical finders of fact and other parties to a bankruptcy proceeding, including those called upon to be expert witnesses in bankruptcy cases.

Based on the authors' combined 75 years of experience in the valuation field, *A Practical Guide to Bankruptcy Valuation*, second edition, lays a solid foundation for those seeking a better understanding of valuation within the bankruptcy context.

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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## Willamette Management Associates

8600 West Bryn Mawr Avenue, Suite 950-N  
Chicago, Illinois 60631  
773 • 399 • 4300/(Fax) 773 • 399 • 4310

### For Immediate Release

CONTACT  
Charlene Blalock  
(503) 243-7509  
[cmblalock@willamette.com](mailto:cmblalock@willamette.com)

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**Chicago Office**

8600 West Bryn Mawr Avenue  
Suite 950-N  
Chicago, IL 60631  
(773) 399-4300  
(773) 399-4310 (FAX)

**Portland Office**

111 S.W. Fifth Avenue  
Suite 2150  
Portland, OR 97204  
(503) 222-0577  
(503) 222-7392 (FAX)

**Atlanta Office**

1355 Peachtree Street, N.E.  
Suite 1470  
Atlanta, GA 30309  
(404) 475-2300  
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