

THE HONORABLE RICHARD A. JONES

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON

ABDIQAFAR WAGAFE, *et al.*, on behalf
of themselves and others similarly situated,

Plaintiffs,

v.

JOSEPH R. BIDEN, President of the
United States, *et al.*,

Defendants.

No. 2:17-cv-00094-RAJ

**DECLARATION OF SAMEER AHMED
IN SUPPORT OF PLAINTIFFS’
OPPOSITION TO DEFENDANTS’
MOTION TO EXCLUDE TESTIMONY
OF SEAN M. KRUSKOL**

FILED UNDER SEAL: EXHIBITS A, F

I, Sameer Ahmed, hereby declare:

1. I have personal knowledge of the facts stated below and am competent to testify regarding the same. I am one of the attorneys for Plaintiffs in this matter, *Wagafe v. Trump*, No. 17-cv-00094 RAJ.

2. Attached as Exhibit A is a true and correct copy of the Expert Report of Sean Kruskol, served on February 28, 2020.

3. Attached as Exhibit B is a true and correct copy of Association of International Certified Professional Accountants (“AICPA”), Forensic & Valuation Services Practice Aid, Forensic Accounting — Fraud Investigations (2020).

4. Attached as Exhibit C is a true and correct copy of AICPA, Business Valuation and Forensic & Litigation Services Section, Calculating Lost Profits (2006).

EXHIBIT A
FILED UNDER SEAL

EXHIBIT B



Worldwide leaders in public and management accounting

Forensic & Valuation Services Practice Aid

Forensic Accounting— Fraud Investigations

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This publication supersedes Practice Aid 07-1, *Forensic Accounting—Fraud Investigations*.

Since the development of this practice aid, the AICPA Code of Professional Conduct (AICPA code) has updated the definition of *client* to be defined as both engaging entity (typically engaging attorney or attorney’s firm) and subject entity (typically attorney’s client). Effective December 31, 2017, the term *client* is defined as “[a]ny person or entity, other than the member’s employer that engages a member or member’s firm to perform professional services (engaging entity) and also, a person or entity with respect to which a member or member’s firm performs professional services (subject entity). When the engaging entity and the subject entity are different, while there is only one engagement, they are separate clients.” (ET sec. 0.400.07)^{fn 1}

For purposes of this practice aid “attorney,” “litigant’s attorney,” and “counsel’s client” are all considered *client* as defined by the AICPA code.

Update as of January 1, 2020

The AICPA’s Forensic and Valuation Services Executive Committee issued Statement on Standards for Forensic Services (SSFS) No. 1 (FS sec.100)^{fn 2} to protect the public interest by preserving and enhancing the quality of practice of a member performing forensic services. Effective for engagements accepted on or after January 1, 2020, SSFS No. 1 establishes standards for a member providing services to a client as part of litigation and investigation engagements. The term litigation as used in SSFS No. 1 and throughout this practice aid is not limited to formal litigation but is inclusive of disputes and all forms of alternative dispute resolution, unless otherwise stated.^{fn 3}

^{fn 1} All ET sections can be found in *AICPA Professional Standards*.

^{fn 2} All FS sections can be found in *AICPA Professional Standards*.

^{fn 3} See Statement on Standards for Forensic Services (SSFS) No. 1, paragraph 1.

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Recent Development Significant to This Practice Aid: AICPA's Ethics Codification Project

The AICPA's Professional Ethics Executive Committee (PEEC) restructured and codified the AICPA code so that members and other users of the code can apply the rules and reach correct conclusions more easily and intuitively. This is referred to as the "Ethics Codification Project."

Although PEEC believes it was able to maintain the substance of the existing AICPA ethics standards through this process and limited substantive changes to certain specific areas that were in need of revision, the numeric citations and titles of interpretations have all changed. In addition, the ethics rulings are no longer in a question and answer format but rather, have been drafted as interpretations, incorporated into interpretations as examples, or deleted where deemed appropriate. Some examples are as follows:

- The "Independence Rule," *Independence* (ET sec. 101 par. .01), will be referred to as the "Independence Rule" (ET sec. 1.200.001) in the revised AICPA code.

- The content from the ethics ruling titled "Financial Services Company Client has Custody of a Member's Assets" (ET sec. 191 par. .081–.082), was incorporated into the "Brokerage and Other Accounts" interpretations (ET sec. 1.255.020) found under the subtopic "Depository, Brokerage, and Other Accounts" (ET sec. 1.255) of the "independence" topic (ET sec. 1.200).

The revised AICPA code is effective December 15, 2014, and is available at <http://pub.aicpa.org/codeofconduct>. The pre-revision AICPA code is available at www.aicpa.org/research/standards/codeofconduct/pages/default.aspx. Citations to the AICPA code in this manuscript are provided in footnotes for both the revised and the pre-revision AICPA code.

The PEEC has created a mapping document that can provide additional assistance in locating pre-revision content in the revised AICPA code. The mapping document is available in Excel format at www.aicpa.org/interestareas/professionalethics/community/downloadabledocuments/mapping.xlsx and can also be found in appendix D in the revised AICPA code.

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Chapter 1

Introduction

The AICPA's Forensic and Litigation Services (FLS) Fraud Task Force revisited AICPA Practice Aid 07-1, *Forensic Accounting-Fraud Investigations* and Special Report *Forensic Procedures and Specialists: Useful Tools and Techniques* to combine these resources into a single, comprehensive practice aid. Revisions were made to accommodate changes in language, scope of coverage, and advancements in the legal, technological, and regulatory environments that have occurred since the introduction of these documents in 2007 and 2006, respectively.

This practice aid provides you, the forensic accountant, also referred to herein as practitioner or member, with a framework for understanding the scope of services, administrative considerations, and investigative techniques that are typically involved in forensic accounting engagements.

Scope of This Practice Aid

Cases involving management fraud, money laundering, tax fraud, bankruptcy fraud, securities fraud, and other types of fraud continue to be prevalent and are increasing in frequency. Fraud issues surface in many engagement circumstances that involve the skills of the practitioner, including attest, tax, and general consulting services. This practice aid discusses your responsibilities, opportunities, and assignments only in the context of forensic accounting services, which comprise both litigation and investigative services as defined in Statement on Standards for Forensic Services (SSFS) No.1 (FS sec. 100),^{fn 1} and provides you with non-authoritative guidance for engagements in which you are providing such services. This practice aid does not set standards for the performance of such engagements or other forensic accounting services.

A key difference between forensic accounting services engagements and other consulting services engagements is that forensic accounting services involve an existing or potential dispute resolution proceeding. Many CPA services that address or consider the possible occurrence or prevention of fraud are not necessarily classified as forensic accounting services. These services include the following:

- Assessing the risk of fraud and illegal acts
- Evaluating the adequacy of internal control systems
- Substantive testing of transactions during an attest or a general consulting engagement
- Designing and implementing internal control procedures
- Proactive monitoring and performing analysis and tests when fraud is not suspected
- Preparing company codes of business ethics and conduct
- Developing corporate compliance programs

^{fn 1} All FS sections can be found in AICPA *Professional Standards*.

These services are not addressed in this practice aid. You may perform many or all of these activities when providing either litigation or non-litigation services that involve concerns about fraud.

When you are providing non-litigation services, you may encounter signs of actual or potential fraud that may be considered within the existing non-litigation services engagement or be addressed specifically in a separate engagement. If an attest team detects errors or irregularities that suggest fraud, the attest engagement team must comply with the applicable professional standards. In doing so, the attest team should report their concerns to management or other company representatives who may, in turn, initiate a fraud investigation using appropriate counsel or a forensic accountant. Management could then provide the findings to the attest team, who would evaluate the findings of the investigation and proceed as appropriate. This practice aid discusses many fraud investigation assignments and approaches but does not suggest that all such services should be included in every practitioner's scope of practice.

Professional Standards and Non-authoritative Guidance

Readers should be aware that the following authoritative literature applies to forensic accounting services as well as any other non-attest service provided by practitioner in public practice:

- AICPA Code of Professional Conduct
- SSFS No. 1
- VS section 100, *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset*,^{fn 2} where applicable

In addition to this practice aid, other AICPA practice aids and tools provide non-authoritative guidance about fraud investigations in forensic accounting services. These publications discuss the nature of forensic accounting services in more detail, including applicable professional standards, conflicts of interest, the differences among attest and forensic services, communication considerations for forensic engagements, and engagement letters.

Limitations of This Practice Aid

The guidance in this document is not a substitute for experience, professional judgment, or skepticism, but is meant to supplement your understanding of how and when these tools and techniques may be useful in obtaining additional evidence that would otherwise not be available during the course of an audit or other engagement. Forensic accounting and litigation consulting engagements often require the use of specialists who have specific training in areas such as data forensics, handwriting analysis, and private investigations. Because of the multi-disciplinary nature of these engagements, you should always be alert to situations where you are being asked by a client or counsel to perform a procedure or express an opinion that is outside of your practice area or competency. These situations present significant professional risks; engagement planning steps should include resource planning so that the necessary skill sets are appropriately provided and risks may be avoided. Technical forensic services practice aids do not purport to include everything you need to know or do in order to undertake a specific type of service. Furthermore, engagement circumstances differ and therefore your professional judgment may cause you to conclude that an approach described in a particular practice aid is not applicable. This practice aid is

^{fn 2} All VS sections can be found in AICPA *Professional Standards*.

designed as educational and reference material for AICPA members and others who provide forensic services as defined in SSFS No. 1.

Prevalence of Fraud

There is no denying that fraud has been and will most likely continue to be a prevalent reality for government and business, including owners, management, and other stakeholders. Numerous studies and statistics demonstrate the impact of fraud to businesses worldwide. These studies reflect the trends and types of fraud schemes, the profiles of perpetrators, and the means of discovery. Along with these data points are projections about the cost of fraud on a global basis. The shortcoming about many survey-based statistics is the leap required to extrapolate and quantify the losses. Many of the fraud studies are based on self-reported or publicly available information. There are countless instances of fraud that have been uncovered and reported privately without publication. There is no practical way to harness all of the relevant data elements into one unified study. The cost of fraud for a company that falls victim to a scheme is serious and can be significant. It is important for owners, management, and other stakeholders to be aware of potential fraud schemes and protect their organizations accordingly. A forensic accountant can be instrumental in both the prevention and investigation aspects related to fraud.

This practice aid is primarily designed to provide you with an overview of the stages along with the identification of resources and tools that may be employed in the execution of a fraud investigation.

Litigation Environment

A stricter regulatory environment and concerns about the economy have caused business owners, management, and stakeholders to take a close look at the litigation trends in the United States as well as overseas. As businesses in certain industries continue to grow, their risk of litigation also increases. Contracts, labor and employment, and personal injury litigation are cited as the three most numerous types of litigation seen by companies.

Against this backdrop, practitioners are often called upon to provide a variety of services to assist the disputing parties and their respective counsel throughout the litigation process.

Elements of fraud allegations are often intermixed within other types of litigation matters such as bankruptcy, family law, business combinations, and economic damages. Although the primary focus of this document is the performance of a fraud investigation, many of the skills and tests employed for the practitioner could be beneficial in other forensic accounting consulting engagements. Chapter 3, “Types of Engagements,” provides an overview of the varied types of engagements that practitioners may face and the investigative techniques that may play a role.

One of the primary goals of a practitioner performing fraud investigations is the delivery of services that are in compliance with relevant legal, regulatory, and professional standards. As such, at the onset of each fraud investigation, it is important that you give careful consideration to building a team with diverse specializations and an understanding of the client-practitioner relationship.

Building a Team With Diverse Specializations

The nature and complexity of services requested of a practitioner in connection with a fraud investigation has increased, and will likely continue to increase, due to the ever increasing complexity of business in general. As such, practitioners often need to assemble multi-disciplinary teams of professionals with specialized knowledge, education, training, and experience so that the investigation is conducted effectively, efficiently, and competently. Although the exact makeup of any particular engagement team is

dependent upon the individual needs of the engagement, in a forensic engagement, you may need to rely on other professionals with specializations in areas beyond your competency.

During the course of an investigation, you may leverage the services of a professional with experience in conducting investigative due diligence. Investigative due diligence activities often include analyzing publicly available information, searching proprietary databases, communicating with third parties, and conducting interviews. Some of the potential benefits of leveraging investigative due diligence services include the identification of the following:

- Criminal, civil, regulatory actions
- Financial distress
- Illegal, unethical business practices
- Related party transactions
- Undisclosed business interests
- Undisclosed liabilities

Other specializations may include computer forensic services and forensic data analysis services, as discussed in chapter 9, “Using the Work of a Specialist,” of this practice aid.

Client-Practitioner Relationship^{fn 3}

At the beginning of an engagement, it is important to determine whether your client, per the engagement letter, is internal or outside counsel for entities or individuals that are subject to the investigation, or both. If counsel is the client, your work may be protected from discovery by opposing parties as long as you are granted legal privilege by the engaging attorney as described below, and you do not share findings or provide opinions to parties that are not similarly granted such privilege with respect to your work. In most instances in which you are retained as a consultant by counsel to assist with its investigation, such work will be protected by privilege. However, if your client is not counsel representing the parties under investigation, then the attorney’s work product privilege most likely will not protect your work from discovery. No matter how you are engaged, you should maintain working paper files and communicate both internally and externally with the expectation that the working papers and the communications will be produced to opposing parties and their counsel. A waiver of the privilege, or a production of documents compelled by a regulatory body, many times causes an unanticipated disclosure.

Legal privilege may protect your work. Legal privilege applicable to practitioners typically falls into one of the following categories:

^{fn 3} Since the development of this practice aid, the AICPA Code of Professional Conduct has updated the definition of *client* to be defined as both engaging entity (typically engaging attorney or attorney’s firm) and subject entity (typically attorney’s client). Effective December 31, 2017, the term *client* is defined as “[a]ny person or entity, other than the member’s employer that engages a member or member’s firm to perform professional services (engaging entity) and also, a person or entity with respect to which a member or member’s firm performs professional services (subject entity). When the engaging entity and the subject entity are different, while there is only one engagement, they are separate clients.” (ET sec. 0.400.07)

All ET sections can be found in *AICPA Professional Standards*.

- *Attorney-client privilege.* The client's right to refuse to disclose, and to prevent any other person from disclosing, confidential communications between the client and the attorney.
- *Attorney work product privilege or doctrine.* Under this rule, anything prepared by, or at the direction of, an attorney in anticipation of litigation is protected from discovery or compelled disclosure. This includes, but is not limited to, notes, working papers, and memorandums.

It is important for you to discuss with the client's legal counsel the extent your work is protected by legal privilege because it may influence communications, both internal and external, and how the work is directed, documented, and disclosed. In instances where legal privilege will be or may be asserted, you should confirm communication and documentation protocols, and work product and written communications should be identified on their face as "privileged" to aid in identification and protection.

Legal Bases for Fraud Allegations and Related Services

Many of the laws, regulations, and rules of the federal government, state governments, and other governmental entities and regulatory bodies specify prohibitions, fines, and penalties for fraudulent activity. The intent is to protect the interests of the pertinent governmental entity and the public. Legal pleadings usually cite the germane law or regulation related to the purported wrongdoing. Examples of areas covered by laws or regulations with fraud provisions include, but are not limited to, the following:

- Antitrust
- Banking
- Bankruptcy
- Computer technology
- Environmental protection
- Financial statements
- Government contract procurement
- Health care
- Insurance
- Intellectual property
- Racketeer influenced and corrupt organizations
- Securities
- Tax

The legal and regulatory guidance for these fraud matters is not static; it continues to evolve. For example, the rapid pace of advances in computer technology continues to spawn new fraud opportunities and schemes, and the legislators and regulators attempt to respond as needed. Therefore, a definitive, unchanging list of fraud-related laws, rules, regulations, and court decisions, along with associated forensic accounting fraud investigative services, cannot be prepared and presented in this practice aid. Instead,

selected examples of specific legal bases for fraud allegations are provided in appendix B, and classes of general fraud schemes are summarized in chapter 3. If you are approached to provide fraud investigation services in any of the listed areas or for similar matters, you might inquire about or research the current legal or regulatory guidance. Also, you should assess the engagement team's skills, experience, and training to deliver the requested assistance in a professional and competent manner.

Chapter 2

Definitions

Certain terms will be used throughout this practice aid. The following sections provide definitions and uniform understanding of these terms:

- Fraud
- Forensic
- Litigation

Fraud

The modern word *fraud* can be traced to the Latin noun, *fraus*, which was based on harm and deceit. The basic components of the legal requirements for fraud comprise a misrepresentation of a material fact made with the knowledge of its falsity with an intent to deceive and whereby reliance is placed on the misrepresented information and, based on this reliance, damage is incurred.

Black's Law Dictionary (Tenth Edition, 2014), defines *fraud* as, "A knowing misrepresentation of the truth or concealment of a material fact to induce another to act to his or her detriment. A misrepresentation made recklessly without belief in its truth to induce another person to act. A tort arising from a knowing misrepresentation, concealment of material fact, or reckless misrepresentation made to induce another to act to his or her detriment."

The U.S. *Code of Federal Regulations* (CFR) describes fraud and false statements as a criminal offense when one knowingly and willfully

- falsifies, conceals, or covers up by any trick, scheme, or device a material fact;
- makes any materially false, fictitious, or fraudulent statement or representation; or
- makes or uses any false writing or document knowing the same to contain any materially false, fictitious, or fraudulent statement or entry.^{fn 1}

Willfully is defined as intentionally or purposely as distinguished from accidentally or negligently.^{fn 2}

In 1888, the U.S. Supreme Court defined *civil fraud* as, "that the defendant has made a representation in regard to a material fact; that such a representation is false; that such representation was not actually believed by the defendant, on reasonable grounds, to be true; that it was made with intent that it should be acted on; that it was acted on by the complainant to his damage; and that in so acting on it the complainant was ignorant of its falsity, and reasonably believed it to be true. The first of the foregoing requisites excludes such statements consisting merely in an expression of opinion of judgment, honestly enter-

^{fn 1} 18 CFR, Part I, Chapter 47 section 1001.

^{fn 2} *Ibid.*

tained; and again excepting in peculiar cases, it excludes statements by the owner and vendor of property in respect of its value."^{fn 3}

The FBI defines *fraud* as, "The intentional perversion of the truth for the purpose of inducing another person or other entity in reliance upon it to part with something of value or to surrender a legal right. Fraudulent conversion and obtaining of money or property by false pretenses. Confidence games and bad checks, except forgeries and counterfeiting, are included."^{fn 4}

Forensic

The term *forensic* is based on the Latin *forensis*, meaning "that which is suitable to present before a forum." For the purpose of this practice aid, a forum includes any trier of fact or decision-making body, including but not limited to the following:

- Judge or magistrate
- Hearing Officer
- Jury
- Arbitration panels
- Audit Committee or other oversight body
- Investigative or Regulatory Agency

Black's Law defines *forensic* as "Used in, or suitable to, courts of law or public debate."^{fn 5}

In more recent times, the word *forensic* has been used within the application of scientific knowledge and methodology to legal problems and criminal investigations. *Black's Law Dictionary* provides examples of these, such as forensic engineering and forensic medicine. Forensic accounting generally applies accounting and financial concepts and techniques to certain types of disputes, such as fraud investigations, litigation and insurance claims, among others. Within the scope of "forensic accounting," practitioners investigate financial fraud and provide litigation support to attorneys and others in a wide range of matters.

Litigation

Black's Law Dictionary defines *litigation* as "the process of carrying on a lawsuit; a lawsuit itself."^{fn 6}

^{fn 3} *Development Co. v. Silva*, 125 U.S. 247 (1888)

^{fn 4} www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/offense-definitions

^{fn 5} Bryan A. Garner, ed. *Black's Law Dictionary*, 10 ed., St. Paul, MN: Thomson West Publishing Co., 2014.

^{fn 6} *Ibid.*

Chapter 3

Types of Engagements

You may be engaged by a client (an attorney or other parties) to provide forensic accounting services. There are two fundamental factors to determine at the onset of any forensic accounting service engagement:

- The manner in which you are retained
- The subject nature of the matter (specialized area)

First, you may be retained as a consultant, an expert witness, or both. In many instances, the practitioner is initially engaged as a consultant only and is later designated as an expert witness.^{fn 1} Although the retaining party is often an attorney, there are many other parties that may engage a forensic accountant. Other parties include an entity, an individual, or groups potentially impacted by fraud such as creditors, shareholders, investors, partners or business managers.

Second, the subject nature of the matter must be determined. There are a number of different roles for forensic accountants within investigative, consulting, and litigation related engagements. To provide context for your role within fraud investigations, it is important to first understand the diverse range of services within specialized niche areas. The primary areas of specialization include the following:

- Fraud Prevention, Detection
- Asset Misappropriation
- Financial Statement Misrepresentations
- Economic Damages Calculations, Mergers and Acquisitions
- Bankruptcy, Insolvency and Reorganization
- Family Law
- Digital Forensic Analysis

While this practice aid is primarily focused on the conduct of forensic accounting services, this chapter provides a brief overview of each specialty area identified in the Certified in Financial Forensics (CFF®) core knowledge areas.

Fraud Prevention and Detection

Frequently, practitioners are called upon to aid in the investigation of a suspected fraud. Although many of the steps performed by the practitioner are similar, it is important to differentiate the types of frauds.

^{fn 1} Refer to AICPA Practice Aid *Serving as An Expert Witness or Consultant* for more information on these roles within litigation and dispute services engagements.

The three major types of frauds are (1) asset misappropriation, (2) financial statement misrepresentation, and (3) corruption or other illegal acts. Keep in mind that one fraud scheme may include all three types of fraud.

Fraud Prevention

There are many roles and services that practitioners may provide in matters related to fraud prevention and corporate governance. Because of practitioners' specialized skills, experience, education, and training, they may provide valuable consulting services in this arena.

Corporate governance-related services include consulting related to the following:

- Matters involving fraud risk assessments
- Matters involving fraud prevention through enhancements to the company's systems of internal controls.
- Development of anti-fraud programs
- Monitoring and enhancing established compliance programs

Fraud Detection

The majority of fraud investigations begin with a suspicion of wrong-doing. The suspicion may be the result of a tip provided to a hotline, an unexpected financial occurrence, a person internal to company (an owner, director, or manager), or the result of an external audit. The company will normally take steps to conduct a preliminary internal investigation. The purpose of the investigation is to determine whether there are fact patterns that indicate there may have been wrong-doing in the area(s) suspected, determine the possible method(s) employed, and attempt to quantify the questionable amounts involved. It is shortly after the point of the preliminary internal investigation or vetting that you may be called in for assistance.

Your work in a forensic engagement does not include making a legal conclusion as to the existence of fraud or determining the liability for fraud. You should understand the legal elements, but your work is based on objective evaluation of evidence gathered. That evidence is presented to the client or a trier-of-fact who may make legal conclusions as to the existence of fraud.

The primary elements of fraud, consistent with the definitions provided in chapter 2, are

- misrepresentation of a material fact,
- knowledge that a statement is false,
- act done with the intent to deceive (referred to as *scienter*),
- reliance was placed on the false representation, and
- damage was sustained as a result.

Asset Misappropriation

Asset misappropriation refers to theft, embezzlement, or wrongful use of an organization's assets. Typically it involves third parties or employees entrusted to manage an entity's assets who abuse their position to steal through one or more fraudulent schemes.

In many cases, asset misappropriation is accounted for appropriately in the financial statements and does not result in financial statement misrepresentation. For example, inventory theft would likely be caught during variances identified during inventory counts. The inventory balance would be adjusted accordingly and the financial statements would not be misstated. To the extent that the misappropriation becomes material, and remains unaccounted for in the accounting records, misappropriation may cause the financial statements to not be fairly presented in conformity with generally accepted accounting principles (GAAP).

Some of the common types of fraud schemes involving asset misappropriation include the following:

- Embezzlement (skimming, larceny, vendor fraud, ghost employees, kickback arrangements, employee expense reimbursements)
- Ponzi schemes
- Corruption or bribery schemes

See appendix D for a list and description of common asset misappropriation fraud schemes.

Financial Statement Misrepresentation

An area in which you may provide forensic accounting services is in the investigation of alleged financial statement misrepresentations. Different from other fraud schemes in which assets are suspected to have been misappropriated, financial statement misrepresentations may not have resulted in the loss of company assets or the addition of company liabilities. The losses generally associated with financial statement misrepresentations are those that may be claimed by lenders, creditors, investors, or shareholders who placed assets or funds with a company on the basis of misrepresentations in the financial statements (or disclosure omissions). Another damage related to financial statement misrepresentations may be in the form of additional compensation (bonuses) paid to executives as a result of meeting certain performance metrics that are ultimately found not to have been met.

The vast majority of financial statement misrepresentation matters involve companies with financial statements that had been audited by an external independent audit firm. Many involve public issuers, whose financial statements are required to be filed with the SEC. Many investigations regarding claimed financial statement misrepresentation are initiated through inquiries or investigations (or both) conducted by the SEC or Department of Justice. Regardless of the initiation of the investigation, practitioners are retained by one or more parties to assist with the fact finding, data gathering and investigative analysis. Frequently, the external auditors will deploy a group to participate in the investigation in a "shadow" role. The shadow role exists so that the audit team receives satisfactory information about the investigation process and results to enable reliance as part of audit evidence. The external auditor does not typically lead the investigation due to the potential impairment of independence.

Generally, the misrepresentations are claimed in one or more of the four areas described as follows, although they may affect multiple areas:

- Income statement (misstated revenue, expenses, net income)
- Balance sheet (asset valuation, misstated liabilities, fictitious assets)
- Cash flow statement (misclassified finance versus operating cash flows)
- Notes to the financial statements, contingent liabilities, pending litigation, variable-interest entities, related party transactions)

Refer to appendix E, “Using the Work of a Specialist,” for details on common financial statement misrepresentation schemes and related detection tools and techniques utilized.

Corruption and Other Illegal Acts

Corruption and other illegal acts include all other violations of laws or governmental regulations not covered in asset misappropriation or financial statement misrepresentation. In recent years there has been a new focus on corporate governance and enforcement of enacted legislation including the Foreign Corrupt Practices Act (FCPA), the Dodd-Frank Act, and the UK Bribery Act to cite a few. A forensic accounting practitioner may serve a number of roles related to the prevention, monitoring, or investigation of claims related to corruption and bribery.

Some illegal acts may have a direct and material effect on the determination of financial amounts, such as payments of bribes to foreign officials in violation of the FCPA. Such payments may be mischaracterized in a company’s books and records as "consulting fees" or "commissions" in order to conceal their illegal nature. Companies may also improperly deduct bribe payments for tax purposes in violation of U.S. or foreign tax laws, resulting in the understatement of tax provisions and overstatement of reported net income. Failure to disclose material effects of bribe payments on a company’s revenues and profits may also violate other securities laws. Other illegal acts may be far removed from the books and records supporting the financial statements, such as violations of antitrust law. Such illegal acts could result in enforcement proceedings that prevent an organization from doing business in a particular market, region or service line. Although this type of enforcement action is further removed from the financial statements, it may represent a serious threat to the continued profitability and projected result of the business.

Economic Damages Calculations

Often, the practitioner is called upon to compute the economic damages of an event. That is, the economic loss or damage that was sustained by the claimant (injured party) but for the actions of the respondent (accused party). This loss can span the spectrum of many types of "injuries": the total loss related to a suspected misappropriation of assets scheme, the loss associated with the reliance on financial statements that contained misrepresentations, the loss of a party due to a claimed breach of contract or partnership dispute, the loss suffered by a party due to a claimed patent infringement, or the loss of an individual claimed in connection with a personal injury or wrongful termination action.

The damage is often a combination of both past losses and anticipated future losses. As such, the computation of economic damages involves a determination of the present value of the damage or loss.^{fn 2}

^{fn 2} For additional information, see AICPA Practice Aids *Discount Rates, Risk, and Uncertainty in Economic Damages Calculations*; *Mergers and Acquisition Disputes*; and *Calculating Lost Profits*.

When conducting a fraud investigation, you should be familiar with, and sensitive to, the possible damage claims that may arise as a result of the investigation. To illustrate the need for this perspective, a few examples are relevant. First, you should understand the subject entity's insurance coverage. The entity may be able to recover some or all of the identified loss if it is able to appropriately substantiate that loss in accordance with its insurance policies. As a more complex example, assume that the investigation affects the earnings growth profile of an entity that recently raised capital. If the capital was raised pursuant to a valuation premised on the entity's earnings profile, but that earnings profile was altered as a result of the fraud, you should be aware that the investor(s) may seek restitution or even rescission.

Alternatively, even a relatively small dollar amount fraud that involves an issue such as bribery may result in potentially significant damages if the alleged fraud were to implicate regulatory consequences.

You should embrace the client interest and communication obligations under SSFS No. 1 (FS sec. 100).^{fn 3} This should include an effort to ensure that the client or its counsel is informed of the nature of the issues subject to the investigation. In doing so, you will be in a better position to understand the possible damage exposures associated with events such as those described in the previous paragraphs.

Bankruptcy, Insolvency, and Reorganization

You may also be asked to work within a bankruptcy setting. Your role may vary depending on the retaining party and scope of assignment. There are three main categories of roles that you may fill:

- Fiduciary (court-appointed trustee, examiner, interim management)
- Consultant (restructuring, strategic, operational, financial, transactional, investigatory, and the like)
- Expert (litigation or valuation related)

You may be retained by the receiver or trustee to perform investigations and analyses related to the company transactions. Alternatively, you may be retained by a number of committees (lenders, bondholders, creditors, and so forth) to analyze information obtained by the receiver or trustee to ensure the interests of the committees are known. In many instances, you may be engaged to investigate a suspected fraud that may have preceded the bankruptcy.

Family Law

You may be engaged to provide services in connection with a family law matter. The role of the practitioner in family law matters varies widely in the manner of retention (court-appointed expert, mutually-agreed-upon expert, or a client-retained expert) and the legal venue. In order to save litigation costs, parties and attorneys involved in family law matters may opt for alternate methods of resolution. You may participate in the alternate legal venues including arbitration, settlement facilitation, mediation, special master, and collaborative law.

^{fn 3} All FS sections can be found in AICPA *Professional Standards*.

Regardless of whether you are retained by one or both sides, your role and scope of work may be similar. Some of the analyses that you may perform include the following:

- Asset tracing
- Asset valuation
- Income determination
- Child support-related computations
- Alimony-related computations
- Tax considerations and planning related to distribution of assets

Digital Forensic Analysis

The U.S. Department of Justice defines *computer forensics* as "the use of scientifically derived and proven methods toward the preservation, collection, validation, identification, analysis, interpretation, documentation and presentation of digital evidence derived from digital sources for the purpose of facilitating or furthering the reconstruction of events..."^{fn 4}

The area of computer forensic analysis is a complex and evolving area of critical importance to the field of forensic accounting and litigation support. Computer forensic analysis can be deployed as a standalone service with no link to fraud or forensic accounting, but is often an integral part of other engagement types.^{fn 5} Almost any type of forensic consulting or litigation engagement will have some portion of the relevant information and evidence from electronic sources regardless of whether a case is in the area of family law, bankruptcy, or economic damages.

Computer forensics are typically engaged to determine what activity took place on a particular device by a user or to restore previously deleted or corrupted data. Computer forensics is commonly performed during a fraud investigation because the results can provide a roadmap as to what the key players involved likely knew, when they were likely to know it, the documents to which they had access, actions taken, with whom they communicated, and whether they appeared to try to hide their actions. The Internet history, web-based e-mail, lost or deleted files, metadata, and logging and registry files are examples of data you can utilize as evidence in engagements.

E-Discovery

Entities and perpetrators of fraud are continually building an electronic diary of where they are physically, what tasks they are executing, and with whom they are communicating. Organizations are maintaining electronic footprints within their various software programs that include details related to financial records, employee databases, production lines, and associated automation, research and development databases, competitor files, and intellectual property, among countless others. Nearly all of this infor-

^{fn 4} www.justice.gov/usao/eousa/foia_reading_room/usab5601.pdf

^{fn 5} See AICPA whitepaper "Computer Forensic Services and the CPA Practitioner."

mation is stored on digital media, whether in desktops, laptops, smart phones, server farms, or in the cloud.

Collectively, information stored in such a manner is referred to as electronically stored information (ESI). The identification and gathering of ESI is commonly referred to as *e-discovery*.

Enhancing and managing the e-discovery process involves the following:

- Information management
- Identification
- Preservation
- Collection
- Processing
- Review
- Analysis
- Production

Often, practitioners may assist clients and counsel in identifying and acquiring ESI in the course of discovery in a litigation matter.

You may also be requested to advise counsel in framing e-discovery requests from opposing parties for production during the discovery stage of a case. This would include assisting in the "meet and confer" regarding e-discovery between each party's counsel that is now a mandatory part of discovery in most jurisdictions.^{fn 6} In turn, you may be asked to assist counsel in evaluating the electronic data produced by the opposing party regarding its sufficiency and responsiveness to discovery requests.

Being able to capture responsive electronic data from the opposing party and convert it into a searchable data set to support further analysis is a key skill required in the computer forensics specialty arena.

Forensic Data Analysis

Practitioners often find themselves in the position of having to analyze large quantities of line items of journal entries, invoice items, receipts, and disbursements. Without the benefits of computer-assisted data analysis in this situation, you would be looking for the proverbial "needle in a haystack." Today, with the sophistication of powerful software and the technological ability to extract large amounts of data, 100% of the population of information can be analyzed. Data can be retrieved from a company's general ledger system, sales databases, time and expense systems, network drives, user files, various types of logs such as web logs (blogs), building access logs, and essentially anywhere electronic data resides. Some of the benefits of incorporating data analysis in a fraud investigation include the following:

^{fn 6} Federal Rules of Civil Procedure (FRCP) Rule 26(f).

- The ability to reduce or even eliminate sampling risk.
- The comparison of relevant types of data from different systems or sources to show a more complete picture.
- The ability to easily trend relevant data over periods of time. Fluctuations in trending lines can be analyzed further for false positives and potential risk factors.
- The quick identification and extraction of certain risk criteria from the entire data population for further analysis.
- The testing for effectiveness of the control environment and policies in place by identifying attributes that violate rules.
- The identifying trends of which company personnel, consultants and practitioners were unaware.

Once either you or a forensic computer specialist has obtained the data within the document production phase, you can use the information in analysis. You should consider the following matters when forensic data analysis will be employed in a forensic accounting investigation:

- Environment and process
 - Use of forensically sound techniques for identification and acquisition of target digital data
 - Maintain a proper chain of custody
 - Establish processes for data preservation
 - Identify method for recovery and reconstruction of lost and deleted data
- Computer forensic knowledge and skills
 - Training and education needed to perform computer forensics
 - Certifications in the field of computer forensics
 - Experience providing expert witness testimony related to digital analyses
 - Methodology for investigation and analysis of forensic images
 - Adherence to reporting techniques and requirements (venue and jurisdiction dependent)

Chapter 4

Engagement Scope and Acceptance Considerations

Although every fraud investigation may be different, the initial steps performed by the practitioner prior to investigating fraud or other types of misconduct are generally similar. They include the following:

- Determining that he or she has the professional competence to complete the requested service, as required by the "General Standards Rule" of the AICPA Code of Professional Conduct (ET sec. 1.300.001 and 2.300.001).^{fn 1}
- Performing a conflict of interest inquiry as required and, if appropriate, a client background check
- Evaluating scope of work and other engagement acceptance issues, including the proposed plan for payment of the practitioner's professional fees and reimbursement of expenses
- Communicating with the client or client's counsel to determine whether the work will be performed under legal privilege
- Identifying the client and reaching an understanding of the nature and extent of services to be performed, including the client's authorization for work to be performed
- Formulating the preliminary plan:
 - Assessing stakeholders (board, auditors, and regulators, for example)
 - Identify potential deliverables and format (report and testimony, for example)
 - Determine resource and staffing needs (roles and responsibilities, for example)
 - Define timing factors (SEC filing date, loan covenant, and board meeting, for example)

Scope of Service

The scope of a fraud investigation should be customized based on the individual facts and circumstances of each engagement. Fraud investigation services include procedures traditionally associated with accountants and auditors, such as the analysis of recorded transactions, as well as investigative techniques used by other professionals, such as forensic accountants, digital forensic examiners, private investigators, and law enforcement personnel. You should consider carefully the nature of the fraud investigation engagement, your ability to competently perform the services, and the personal and professional risks that may be involved. As necessary, you should review with counsel applicable rules, regulations, or statutes that may influence the decision to accept the engagement. Some states, for example, have extant private investigator licensure regulations that may limit the nature of procedures that you may perform. Such regulations often cover a very broad range of investigation activities without granting specific ex-

^{fn 1} All ET sections can be found in AICPA *Professional Standards*.

emption or accommodation for practitioners. You should evaluate such possible constraints when defining the engagement's scope. When appropriate, you should decline all or part of a potential engagement and consider deferring to others to provide the requested services.

Conflicts of Interest

In compliance with the AICPA Code of Professional Conduct and the standard for communication set forth in Statement on Standards for Forensic Services (SSFS) No. 1 (FS sec. 100),^{fn 2} you should inform the client of any conflicts of interest. The "Conflicts of Interest for Members in Public Practice" interpretation (ET sec. 1.110.010) under the "Integrity and Objectivity Rule" indicates that a conflict of interest may occur if, while performing a professional service for a client, you or your firm has a relationship with another person, entity, product, or service that could be viewed as impairing your objectivity. The rule provides, however, that if you believe you can perform the professional service objectively and if you disclose the relationship to the client and other appropriate parties and the client consents to your acceptance of the engagement, you are not prohibited from performing the professional service.

When you are approached to conduct a fraud investigation, prior to performing any work, you should promptly conduct a thorough review of client relationships and other potential conflicts of interest. Before accepting an engagement, you should, to the extent allowed under confidentiality requirements, disclose to the client any situations that may be viewed as a conflict of interest so that each party can separately assess the possible impact of such facts.

The practitioner's responsibility to evaluate the potential for conflicts of interest is ongoing and not limited to the engagement acceptance process. During the course of a typical fraud investigation, you may become aware of additional entities and individuals for which a thorough review of client relationship and other potential conflicts of interest will need to be undertaken in a timely manner. If you identify potential conflicts, you will need to disclose them to the client. If the conflicts are not resolved to the satisfaction of all interested parties, you may need to withdraw from the engagement. You should also consider that a divergence of interests may arise as the investigation progresses between the shareholders and management, internal and outside directors, or the audit committee and others, and that such changes might impair your ability to objectively complete the assignment.

Furthermore, to comply with SSFS No. 1, you should communicate to the client any serious reservations concerning the scope or benefits of the engagement before accepting the engagement or during the engagement. The SSFS No. 1 requirement for communication with the client is relatively broad and does not supply specific guidance for satisfying the communication obligation. You may communicate conflict of interest considerations, serious reservations, or significant engagement findings and events to the client either orally or in writing, but, whatever format you use, the same professional standards apply. Many practitioners consider their duty to communicate with the client to be met if the communication was made to the client's attorneys. In an effort to avoid potential misunderstandings, this expectation may be set out in advance in the engagement letter.

Engagement Acceptance Issues, Including Payment of Fees

You need to use astute business judgment in deciding to accept or decline a fraud investigation engagement. Generally, fraud investigations expose you to unique risks as compared to other types of consult-

^{fn 2} All FS sections can be found in AICPA *Professional Standards*.

ing assignments. For example, you may be asked to evaluate specific business transactions or practices prevalent in other companies in the same industry, including some clients. If you are asked to help defend individuals accused of criminal activity, you need to anticipate possibly seeing your name appear in media reports about the proceeding or possibly being accused of helping the perpetrator cover up the alleged wrongdoing. You should assess the potential business implications of such factors, and others, before accepting the engagement. You might also consider the possible exposure to personal threats or harm that may ensue. Finally, you should ensure that you can enter the engagement with access to the requisite skills, training, experience, resources, and, if appropriate, legal counsel.

SSFS No. 1 requires you to establish with the client an understanding about the responsibilities of the parties and the nature, scope, and limitations of the services to be performed. Also, you could reach an understanding with the client regarding the fee arrangements. The collection of a retainer is common for the forensic accountant investigating fraud, especially when retained by a criminal defendant. Before accepting the engagement, you might obtain assurance about the criminal defendant's ability to pay the fees and expenses. You should be mindful that funds received for payment of services may be subject to forfeiture if the funds were criminally derived. Clients, especially criminal defendants convicted of wrongdoing, often lose the desire or ability to pay the forensic accountant. Therefore, you may consider obtaining a sufficiently large retainer and using other means of security to help ensure full compensation. Billing and collecting from clients on a semimonthly or weekly basis may also be appropriate.

If a client has not paid for services performed and expenses incurred, but continues to promise payment, consider temporarily suspending work, especially if the engagement letter so provides. If ethical codes and laws permit, delivery of the work product may be withheld until new payment terms have been arranged. In addition, consider not providing expert reports, deposition or court testimony until the client has paid for the expenses incurred and services rendered or to be provided, assuming the forensic accountant does not receive a valid and enforceable subpoena to appear as a witness.

If you have not been paid or have not arranged for payment in a reasonable period regardless of the outcome of the dispute when you are testifying on behalf of the client, it could appear that you are performing services for a contingent fee, which is prohibited in SSFS No. 1, paragraph 9, when a member is engaged as an expert witness. You should expect that the opposing party may suggest that this influences your expert opinions. Even though a de facto contingent fee arrangement does not exist, the appearance of such an arrangement could have a negative impact on your perceived credibility. In many states, practitioners are prohibited from accepting contingent fee engagements, especially for expert testimony.

Some practitioners are able to charge higher hourly rates for investigative work and related testimony. The higher hourly rates can often vary depending on the nature and timing of the investigation. However, when a fraud investigation is conducted in the context of bankruptcy matters, the hourly rates may not exceed the rates charged by the practitioner for similar services in non-bankruptcy matters.

Oral or Written Understandings

According to SSFS No. 1 understandings with clients for forensic services may be either oral or written. Many practitioners, especially in fraud investigations, use the engagement letter to establish a clear understanding about the nature and extent of professional services to be rendered, the degree of responsibility assumed by the forensic accountant, and any limitations on liability established by the forensic accountant. Often, the engagement letter describes the roles and responsibilities of the parties. However, it does not describe expected results or make any guarantees regarding the findings or outcome of the fraud investigation. The trier of fact determines guilt or innocence, so you should avoid opinions regarding the guilt or innocence of any parties involved in the investigation, especially in the engagement letter and any other written communication to the client or other interested parties. Further, an engagement let-

ter issued to or received from an attorney-client should clearly document any relationship protected by the attorney-client or attorney work product privilege. Appendix C presents examples of descriptions of the scope of work in fraud investigation engagements that could be used in engagement letters.

Staffing Engagements

The practitioner performing fraud investigations often uses assistants to inventory documents and data; identify relevant records; input, compile, sort, and analyze data; trace the flow of funds; conduct interviews; and perform other necessary accounting and support functions. It is your responsibility to staff engagements with adequately trained resources and to provide proper supervision. In addition, all engagement team members should be familiar with the chain of custody related to evidence gathered in connection with the investigation. The admissibility of evidence will depend on your implementation of appropriate and reasonable steps to preserve the chain of custody. When testifying as an expert, you may be asked questions about the qualifications and experiences of assistants, the services performed, the specific instructions given, the supervision provided, the assistants' findings or comments made during the performance of the job, and other questions regarding job performance. These factors should be considered in staffing and performing the engagement. On occasion, assistants may be called upon to testify under oath as fact witnesses about the work they performed.

Additionally, the practitioner performing fraud investigations will often leverage the work performed by specialists to include computer forensic analysis for the identification, collection, preservation, and analysis of ESI and e-discovery services for the securing, processing, hosting, and searching of ESI. When this is the case, you must ensure that the work of the specialist that is being leveraged is adequately planned and supervised.

Chapter 5

Engagement Performance

The objective of a forensic accounting investigation is to gather sufficient relevant data to help the client or trier of fact reach a conclusion on the merits of the suspected or alleged fraud. You are seeking to resolve the full methods and extent of improprieties that are suspected or known. Your concern is not reaching a general opinion on the financial statements taken as a whole but making an assessment regarding the factual information about a suspected or known impropriety. As a result, it is less effective for you to rely on a sampling methodology and more effective for you to seek and examine all relevant evidence.

Once you, in coordination with the client, have determined the initial scope and you have accepted the engagement, the investigation begins. A key part of enabling the appropriate analysis is the identification and collection of data elements up front. After appropriate data is collected, the analysis and interviews can begin. Each of these elements is profiled in this chapter.

It is important to keep in mind that every investigation is unique. As such, the sequence of steps actually performed in an engagement may vary from the sequence as presented in this chapter. For example, often times certain interviews occur prior to data collection. This may serve multiple purposes including aiding in identification of relevant data, ensuring that memories are more recent, and setting witness statements early. Also, depending on the circumstances, certain types of techniques may not be necessary to achieve the investigation objectives.

Since 1975, forensic investigators have used seven recognized investigative techniques.^{fn 1} You can view these seven investigative techniques as available tools to utilize in an investigation, depending on the unique circumstances. It is helpful to frame the engagement performance steps along with these related techniques:

1. Public document review and background investigation
2. Interviews of knowledgeable persons
3. Confidential sources
4. Laboratory analysis of physical and electronic evidence
5. Physical surveillance and observation
6. Undercover operations
7. Analysis of financial transactions

The remainder of this chapter provides an overview of how you may utilize the seven investigative techniques during the investigation. In most fraud investigations, a combination of background research,

^{fn 1} R.A. Nossen, *The Detection, Investigation, and Prosecution of Financial Crimes* (Thoth Books, 1993).

both hardcopy and electronic evidence collection and analysis, along with interviews with knowledgeable persons are part of conducting a thorough investigation.

Public Document Review and Background Investigation

At the onset of a fraud investigation, background research may be conducted for the business, its owners, employees, related parties, and any potential targets of the investigation. A wide range of publicly available information can assist you in framing an issue or completing a background investigation.

You can gather a significant wealth of background intelligence through online and public records searches. A search of public records may be relevant to any given fraud investigation. Many public agencies have made access to public records easier by moving the information online. Several online search tools are free and others are available on a subscription basis. A good starting point for public data is www.usa.gov where you can access all U.S. government departments and agencies. There are also links to each of the states. Types of publicly available information may include real and personal property records, corporate and partnership records, contractor license data, civil and criminal records, stock tracking information and vendor verifications. Other public sources may include the following:

- Newspaper articles
- Philanthropic and outside interests of persons associated with the investigation
- Filings with the SEC, which can be accessed through EDGAR
- Uniform Commercial Code filings
- Incorporation records and fictitious business name filings
- Commercial media database searches
- Global risk and compliance database searches
- Civil court records
- Internet and social media searches

Third party data providers such as Dun & Bradstreet have reports available on a majority of U.S.-based businesses. Often, this initial research uncovers potential related parties (persons or entities) that may warrant further scrutiny during the investigation.

Interviews of Knowledgeable Persons

One of the key sources of information in a fraud investigation is the interview. The objectives of the interview are (1) to gather evidence related to the alleged wrongdoing (including potential motives on the part of the perpetrator), and (2) to understand how the alleged wrongdoing occurred. The goal of information-seeking interviews is to obtain knowledge that will sustain and focus further inquiry. Such interviews may be conducted with individuals who have information about the company, industry, or the accounting issues; those who may have knowledge about potential targets of the investigation; or witnesses who have more direct knowledge of the allegation. Often, a practitioner will start interviewing at the periphery of possible interview candidates and move closer to the subjects of the investigation. At this early stage, it may be worthwhile to have an initial conversation with the subjects or targets of the inves-

tigation about the issues and evidence collected before going to an admission-seeking interview.^{fn 2} Information you obtain during the interview may also identify additional concerns that you will need to pursue over the course of the investigation. As noted earlier, the timing with which you conduct the interviews may vary by case.^{fn 3}

Planning the Interview

You should carefully plan the selection of interviewees and the sequence and timing of interviews. Ideally, you will conduct interviews after you (1) have reviewed the key documents, (2) have an informed grasp of the facts relevant to the inquiry, and (3) have an understanding of the roles, responsibilities, and relationships between the individuals to be interviewed. You can leverage this background when posing questions to individuals who may have knowledge of the alleged wrongdoing. You should continuously reevaluate and adjust the list as you learn additional facts. The list may include whistleblowers, board members, employees, customers, vendors, and the purported perpetrator(s) themselves.

You should also prepare an interview schedule that thoughtfully assigns each witness to an interview date. If a whistleblower is involved, you should interview the whistleblower first, to gather as much information regarding the allegations as possible (preferably off-site to minimize the risk of discovery). You should do all of the interview planning in coordination with and at the direction of counsel.

You should prepare for each interview first by understanding the suspicions or allegations of fraud and the possible role of the witness and, second, by assembling and incorporating key evidence and questions into a comprehensive interview outline. The interview outline should have questions designed to elicit answers to the five basic fraud questions: who, what, where, when, and how. You should use the interview outline as a basis from which to logically and skillfully question witnesses to uncover new facts and corroborate your understanding of evidence already uncovered related to the alleged wrongdoing.

The Interview Setting

It is important that you maintain control of the interview. Interview witnesses individually, in an environment where they are comfortable. It is often useful to position the interviewee facing a windowless wall to help minimize distractions. The interview should be conducted by at least two interviewers, one who leads the questioning and a second whose primary responsibility is taking notes of what is discussed during the interview.

During the Interview

At the onset of the interview, provide the witness with some background regarding the investigation. You should be polite and respectful and make it clear that your job is simply to understand the facts and circumstances surrounding the allegations at hand. If counsel is present in the interview, he or she may provide an Upjohn notice^{fn 4} to the subject. The interview should then progress through the sections of

^{fn 2} Admission-seeking interviews may be conducted by the forensic accountant depending on the level of evidence and testimony gathered to-date as well as advice of counsel.

^{fn 3} See AICPA whitepaper "Conducting Effective Interviews" for more information on this technique.

^{fn 4} The American Bar Association Litigation Section article "The Benefits of a Miranda-Type Approach to Upjohn Warnings" provides background. "Following the seminal decision in *Upjohn Co. v. United States*, 449 U.S. 383 (1981), attorneys conducting internal corporate investigations typically provide certain warnings to corporate employees they interview, including that counsel is working

the interview outline, which typically include questions regarding the witness's background (education, job history, and responsibilities), knowledge of the allegations, understanding of others who may have knowledge of the issues, and questions regarding any documentation the witness may have to support or rebut the claims of wrongdoing. Ask clarifying questions to ensure that you understand the witness's response and challenge inconsistent or obviously false or misleading answers. Use inquisitive language and be sure to include a generous number of open ended questions to encourage an open dialogue, as opposed to accusatory language or primarily closed questions, which may agitate a witness and make him or her less forthcoming. Listen carefully and do not interrupt interviewee responses to questions.

Concluding the Interview

End the interview by asking if the witness would like to share or discuss anything else, and inform the witness to contact you if he or she recalls or thinks of anything else that would be useful.^{fn 5} In the rare instance that an interviewee has provided a confession, it is important that you transcribe the information gathered into a statement and have the subject and a witness sign and date it. You should discuss with counsel the specific protocol to be followed in the event of a subject confession.

Meeting Notes

During an investigation, you will normally work with clients, client staff, attorneys, and others associated with the case. After conferring with client counsel, you may talk with law enforcement officers, prosecutors, opposing counsel, members of the media, and others. For such encounters, you may prepare notes of conversations with these individuals. The notes generally indicate the meeting date, names of participants (in the meeting or telephone call), questions, responses to questions (in summary form, quoting as necessary), and other information that may assist you in the future. Notes may be discoverable and you should discuss with counsel the retention of notes and content issues. Avoid recording unnecessary, gratuitous, or unsupported comments and opinions in the meeting notes.

Conversations with an attorney who is either your client or your own legal representative may be confidential and privileged under the attorney work product doctrine as long as you are not designated as an expert witness. If a consulting expert becomes a testifying expert, all materials become discoverable.

Confidential Sources

In nearly every organization, there are people who are willing to share information if they can remain anonymous. In a number of cases, confidential sources have provided information through employee hotlines and anonymous letters. Investigations initiated from information obtained from confidential sources may be difficult to scope due to lack of specific details or information in the allegation. Practitioners will often take advantage of reporting mechanisms in place that allows them to contact the confidential source to request additional information. In some instances, a confidential source will be willing to meet with you either in person or over the phone. The goal of these interviews is to gather additional information from the source to target the investigation as well as to assess the credibility of the allegation. Despite their usefulness, confidential sources, or even paid informants, are more often directly

for the employer, not the employee; the attorney-client privilege is in effect; and the privilege is held by the employer, and the employer alone can decide to waive it."

^{fn 5} Please see AICPA whitepaper "Conducting Effective Interviews" for more information and details about the involvement of counsel and witness' rights.

sought after in law enforcement settings given the resources and techniques available to law enforcement personnel not usually available to practitioners.

Certain confidential sources may have a hidden motive for providing information. A prudent practitioner will seek to corroborate the information provided before placing reliance on it as evidence. You should stress that there can be no assurances of absolute confidentiality. For example, an audit committee of a board of directors may waive the confidentiality agreement previously given in order to comply with a government regulator's request for information. Additionally, a subpoena may be used to compel you to reveal the identity of a confidential source, which would force the source to come forward.

Laboratory Analysis of Physical and Electronic Evidence

In short, laboratory analysis covers both the collection and analysis of data as evidence in the investigations. It is important that you perform a thorough data capture of documents and electronic media that may contain information relevant to the investigation. There are many forms of evidence, including both financial and non-financial information. Examples of financial evidence include financial statements, internal accounting records, source documents, payroll journals, and so forth. Non-financial evidence includes information sourced from e-mails, text messages, memorandums, and meeting minutes, operating agreements or contracts. Often, financial evidence is referred to as structured data and non-financial information is referred to as unstructured data. The most important forms of data vary from one investigation to the next.

In identifying important sources of evidence, consider such factors as the business responsibilities and system access of those believed to be involved as well as the company size and industry. Important sources of evidence include hard copy documents maintained in employees' workspaces and other on-site storage, as well as off-site storage. Additional sources of data may include personal and work-related computers, phones and other mobile devices, as well as e-mail accounts.

Take great care in the manner that electronic data is captured, processed, and hosted. The term *digital forensics* is often used to describe the collection and analysis of information from computers and other digital storage media to identify information relevant to an issue under investigation. Be sure that the imaging of computers and servers is created and preserved in a manner that will withstand a legal challenge with the proper chain of custody records. A data forensics specialist may be called in to obtain an image of a computer hard drive so you may have a working copy. Also, be thoughtful when assessing the type of electronic data that may be helpful.

In a litigated matter, the sources of data will normally include information from the client (who has retained the practitioner, either directly or through counsel), the opposing party, and possibly third parties (banks, trustees, custodians, and the like). Typically, these materials are provided with unique identifiers called *Bates ID numbers*. In a document production, each static page is numbered uniquely. Commonly, the producing party will prefix the numerical sequence with alpha characters that denote that party's entity. For example, documents produced by ABC Company may be Bates ID labeled as "ABC0001," "ABC0002," and so on. In recent years, the production of native electronic files has introduced a challenge to the gathering, tracking, and reviewing of Bates ID documents. It is important for the practitioner to maintain a comprehensive index of the various documents produced.

Physical Surveillance and Observation

Although physical surveillance is generally viewed as a law enforcement technique, you can apply it in a forensic accounting investigation through direct observation. This involves observing situations, witnesses, or suspects to identify anomalies in behavior. Additionally, direct observation of a process or se-

ries of transactions allows you to understand the expected or routine process and better-identify an anomaly or deviation from the norm.

Undercover Operations

This technique is rarely employed by a forensic accountant. In some instances, the investigation team will include special counsel, private investigators, or law enforcement individuals who may perform these actions, if needed. It is important that you check the relevant state laws regarding these operations and consult with counsel before performing any type of undercover procedure.

Analysis of Financial Transactions

Data analysis involves the review of data sets to identify trends or anomalies to help you target the investigation. There are a number of approaches to data analytics ranging from traditional financial analysis (for example, ratio analysis) to sophisticated computer assisted techniques that look for data correlation and unexpected patterns in the behavior of data.

Financial transactions within the company's accounting records and financial statements provide a lot of information about a business. A variety of analytics can be prepared over the internal financial information. Additionally, company bank records are typically a critical data source for asset tracings between accounts and potential perpetrators or co-conspirators, or both.

Practitioners commonly use several techniques to aid in the analysis of data. The results of data analysis will provide direction for specific areas that should be examined further. The following table discusses some of the most common techniques.

<i>Technique</i>	<i>Description</i>
Time-Series Analysis	Comparing the same data or ratios of a company over multiple time periods to identify trends, patterns or anomalies in specific accounts or groups of transactions. Both horizontal and vertical analyses fall under the time-series category of analytics.
Cross-Sectional Analysis	Comparing company financial data or performance to that of another company or industry.
Ratio Analysis	Calculating and interpreting financial ratios to analyze and monitor a company's financial performance. Ratios are used to measure liquidity, activity, leverage and profitability. The basic inputs to ratio analysis are the firm's income statement and balance sheet.
Benford's Law Analysis	Digital analysis whereby numerical data sets are compared to known predictable rates of occurrence for numerical digit placement. Anomalies to the distribution of digits may identify a population that warrants further investigation.
Sequential Analysis	Analysis of gaps or duplicates in sequential documents such as invoices or checks.

The results of a typical data analysis may make you aware of other areas requiring investigation and you will therefore find it necessary to request and collect additional data. This iterative process may repeat several times during the course of an engagement.

Today's modern financial systems used as the basis for a company's financial transactions, processing, and reporting hold significant and valuable information beyond the standard financial entries and reports. The analysis of electronic financial records, if done properly, can result in enhanced and expedited investigations. For example, if you are looking into claims of financial statement fraud by an individual within a company's accounting department, a direct analysis of financial records related to that employee could pinpoint activities for further inquiry and investigation. The ability to electronically analyze relevant financial records in their entirety rather than on a sample basis is now an option when reviewing large data sets, due to the use of technology. Technology assisted analysis increases the likelihood that you can efficiently locate financial anomalies and inconsistencies. Finally, most modern financial systems maintain audit reports or logs of system activity. These audit trail reports can be a valuable source of information about which transactions have been modified since their original entry and by whom.

Internal Financial Records

A common starting point for fraud investigations is to perform a horizontal analysis of the monthly and annual internal financial statements of the company. Typically, a period of three to five years will allow for understanding of trends and seasonality within the business.

A vertical analysis can show the key components of a profit and loss statement as a percentage of sales. The vertical analysis may identify certain periods or years when there is an unexpected change in the measure of an expense as a percentage of revenues.

Finally, you may wish to perform ratio analyses that pertain to the areas of suspected defalcation. Some common ratios include current ratio, quick ratio, working capital ratio, inventory turnover, receivables turnover, gross margin ratio, expense ratio, and operating margin ratio.

External Financial Records

Bank and brokerage account records provide a wealth of information regarding transactions, sources and uses of funds, existence of other accounts and other financial institutions, and potential related parties and co-conspirators. Analysis of such records is often used in damage calculations, money laundering securities fraud, matrimonial, and other cases. You can also use these records to trace the flow of funds to facilitate the seizure and forfeiture of misdirected assets in order to provide restitution to victims of financial crimes.

Chapter 6

Engagement Reporting and Deliverables

Disclosing Findings of Potential Fraud

After gathering sufficient relevant data to confirm or negate the suspicions or allegations of fraud, or even suggest that the findings are inconclusive, you may prepare an investigative report. Investigative reports should communicate the important factors, the process utilized, and the results. Reports often include memos of interviews, charts, exhibits, and copies of important documents. The report should reflect the neutral or objective posture you maintain throughout the investigation. Avoid stating any legal conclusion about whether fraud does or does not exist, leaving that determination to legal counsel or a trier of fact. Paragraph 10 of Statement on Standards for Forensic Services (SSFS) No. 1 (FS sec. 100),^{fn 1} prohibits a member from opining on the ultimate conclusion of fraud (except when the member is the trier of fact). Stating any such conclusion may expose you to legal liability.

You can communicate your findings by a variety of oral or written means. In certain circumstances (regulatory investigations or litigation), standards for reporting procedures and results may be prescribed either by law or professional standards.

Practitioners do not normally disclose an apparent fraud to law enforcement authorities, regulators, or potential victims of the fraud scheme without the clear consent of the client or the client's legal representative. Whenever there is a doubt concerning responsibilities, refer to the applicable professional standards and consult with the appropriate legal counsel. In the performance of consulting engagements, including fraud investigations as a litigation service, you are guided by the AICPA Code of Professional Conduct (AICPA code) and SSFS No. 1. In particular, "Principles of Professional Conduct" (ET sec. 0.300)^{fn 2} of the AICPA code specifies that the CPA shall not disclose confidential client information without the consent of the client. Therefore, you should obtain appropriate advice or legal counsel before unilaterally disclosing investigation findings.

Written Communications

Forensic accounting services as defined in SSFS No. 1 are subject to the professional standards embodied in the AICPA Code. The communication standards promulgated by the AICPA that apply to forensic accounting services are limited to the general requirement of communication with the client in SSFS No. 1, which states, "Communication with client: Inform the client of (a) conflicts of interest that may occur pursuant to interpretations of the "Integrity and Objectivity Rule" (ET sec. 1.100.001 and 2.100.001), (b) significant reservations concerning the scope or benefits of the engagement, and (c) significant engagement findings or events." Although SSFS No. 1 requires that the CPA communicate with the client, the standard does not require a written report, nor does it apply exclusively to written consulting reports.

^{fn 1} All FS sections can be found in AICPA *Professional Standards*.

^{fn 2} Pre-revision code: ET section 50.

All ET sections can be found in AICPA *Professional Standards*.

Information contained within a report may vary depending on the client needs, advice of counsel, the practitioner's preference or style, and the nature of the engagement. When the matter is subject to the *Federal Rules of Civil Procedure* as in the case of expert reports, you should consult with counsel to determine if the relevant district of the U.S. District Court has implemented or amended the requirement for expert written reports. You should also consult with counsel to ascertain whether any similar requirements exist in relevant state, local, or administrative courts. If you are designated as an expert witness, the written report may be subject to discovery by the opposing party. Therefore, before preparing written work product, you might discuss with the client the need for the writing, the format, style, and content and the timing of submission.

Written communications about fraud investigation findings can take a variety of forms, including brief letters, memorandums, white papers, affidavits, declarations, and detailed reports. Formal written reports, exclusive of the requirements under *Federal Rules of Civil Procedure*, generally contain common elements such as the following:

- *Introduction*. Describes the purpose of the engagement and standards followed including reference to SSFS No. 1.
- *Table of contents*. Summarizes the contents of the document as reports often contain various sections, exhibits, and attachments.
- *Executive summary*. Utilized in large reports to summarize the information contained within the details of the report.
- *Background*. Provides the reader with facts and circumstances surrounding the fraudulent events at issue.
- *Scope*. Information regarding the nature of the investigation and limitations of the work performed.
- *Detailed information*. Procedures and findings are documented.
- *Recommendations*. Information regarding what additional procedures or steps should be taken along with suggestions for remedial steps to reduce the likelihood of recurrence of the issue.
- *Conclusion*. Overall conclusions drawn from the investigation.
- *Other information*. Exhibits, attachments, and reference material.

The report should avoid legal conclusions about the existence or absence of fraud but should relate the procedures performed and the factual findings. Assurances or guarantees of completeness should be avoided.

In insurance-related investigations such as recovery on a fidelity bond claim, you can help document fraud losses through a written communication commonly referred to as a *proof of loss*. The proof of loss is issued to insurance carriers and summarizes the results of the investigation and the estimated loss amount. It also contains supporting calculations and relevant data and is examined by the insurance company. The insurance company can ask the insured to provide further proof of its claim. When disputes arise between the insurance company and the insured, you may assist in resolving the disagreement or provide expert witness testimony.

Oral Communications

Oral communications will generally occur throughout an engagement regardless of whether you prepare any written communication. You will normally present oral statements about the fraud investigation privately to the client, but you may also present them in a deposition, a courtroom, or another dispute resolution forum, or before an administrative or regulatory body. As an expert witness, you may give oral testimony as an adjunct to a written investigative report or without any accompanying report. Criminal prosecutions generally restrict pre-trial discovery concerning experts, so many criminal defense attorneys, in particular, will not ask you to prepare a comprehensive written report. Instead, they may prefer only oral testimony that is supported by demonstrative evidence and your working papers. You must support any oral expressions of findings or expert opinions with sufficient relevant data. Furthermore, your oral statements should be sensitive to the same legal liability exposures as a written report.

Chapter 7

Deposition and Trial Testimony

Deposition and trial testimony are two important aspects of your service delivery. It is the culmination of the work you performed to produce a convincing analysis and expert report. It is the logical conclusion to your data collection and data analysis phases, which we discussed in earlier chapters of this practice aid. When you are going to be deposed, the opposing attorney will ask specific questions about your background and basis for your conclusion or opinion, which includes gaining a detailed understanding of the theory, assumptions, and calculations you relied upon for your expert report. Trial testimony is the point at which you present your work to the trier of fact, who is going to make the decision as to guilt, liability, and amount of damages or other determination. For both deposition and trial testimony, you should be prepared for vigorous cross examination on the basis, theory, assumptions, and calculations you relied upon in arriving at your conclusion.

For successful deposition and trial testimony to occur, you should address a number of important factors. Specifically, you should offer credible testimony to demonstrate to the trier of fact that you can provide assistance to the court given your specialized skills. You should adhere to the standards set forth by the AICPA. Likewise other sources of non-authoritative guidance might be relevant to the circumstances of your engagement. In addition, when performing the expert witness service, you also need to understand the following areas:

- Guidance applicable to the civil litigation services
- Laws, statutes, and regulations that are applicable
- Federal, state, and local requirements
- Whether any case precedent exists
- Court and other authoritative orders that may affect the opinion offered

Expert witnesses are engaged on financial and accounting issues because of the ability to present complex information in a manner that is understandable to the trier of fact. In these engagements, you will be expected to present testimony in an unbiased manner that reflects integrity and objectivity.

You should also be attentive to the potential impact that forensic accounting services may have on the independence requirements of existing or future attestation services to the client as well as the likelihood that prior relationships could affect your credibility on the calculations or the opinion with the trier of fact.

Of note are two seminal U.S. Supreme Court cases that set the primary legal precedent for the admissibility of expert testimony in federal cases: *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), (Daubert), and *Kumho Tire v. Carmichael*, 119 S.Ct. 1167 (1999), (Kumho). However, these cases are referenced as guidance only and do not necessarily comprise all factors and considerations related to the admissibility of expert witness testimony. These cases provide tremendous insight into the strong views courts hold toward the admissibility of expert testimony.

The balance of this chapter provides an overview of the most critical components for you to address to be prepared to provide credible expert witness deposition and trial testimony:

- Qualifications
- Deposition testimony
- Trial testimony

Qualifications

One of the most significant factors related to the admission as an expert witness rests with your qualification to serve in the capacity as an expert witness. Specifically, the qualifications begin with your possessing some specialized skills, knowledge, education, experience, and training in a particular area and result in the presentation of conclusions, judgments, or opinions with integrity and objectivity.

Rule 26(a)(2) of the *Federal Rules of Civil Procedure* provides specific guidance for the expert witness disclosures. Specifically, the expert witness disclosures must include the following:

- A list of publications authored in the previous 10 years
- A list of cases in which the expert testified during the previous four years, at trial or by deposition
- A statement of the compensation to be paid for the study and testimony in the case

Also be aware that once disclosed as an expert witness, opposing legal counsel is likely to scrutinize your reputation, published works, prior testimony, and opinions, as well as any other factor that might be relevant, in an effort to challenge qualifications or to discredit or limit your expert testimony.

Deposition Testimony

Once you are named as an expert witness, you need to understand that you must be an unbiased fact finder for the court and not an advocate for your party. The attorneys are advocates for their clients, so exercise caution when offering expert opinions. You should, depending on the facts and circumstances, consider engaging or consulting with his or her own counsel during a challenge of your expert opinion (that is, a Daubert challenge).

During a deposition, answer honestly at all times because you are not only required to do so under ethical standards but because of the risk of penalties and reputational harm of committing perjury.^{fn 1} Therefore, it is critical that any weaknesses in the information you are relying on be communicated to the client as soon as possible. In addition, answer questions without volunteering additional information. Read the deposition transcript carefully before signing, and again before testifying at the trial, because it often will serve as a script for the cross-examination by opposing counsel.

Trial Testimony

When providing expert testimony, your every word, in your reports, deposition, or trial testimony, will be scrutinized by intelligent and experienced attorneys and opposing experts. Any weakness or incon-

^{fn 1} Zeigler, Jessalyn H., and Allyn Rubright Gibson. *Perjury During Depositions and Its Consequences*. American Bar Association, 11 June 2012. Web. 12 Feb. 2014.

sistency in testimony could be used against you to impair your credibility or the validity of your opinion. Therefore, before accepting an engagement, review your testimony given in previous engagements to be sure it is consistent with the testimony anticipated in the prospective engagement. If you have no previous testimonial experience, before accepting an engagement you should consider whether your background is appropriate for the engagement and whether this litigation is a proper one for your experience.

Consider whether your testimony would be consistent or inconsistent with the position of the client to the extent that it does not impair your integrity or objectivity. Your testimony should be consistent with the positions taken in your report. Overall, you should be honest and consistent with your report.

Finally, as credible expert witness, you need to advocate for your opinion. When advocating that opinion in the expert report, at deposition, or during the trial, if you rely upon sound and proven damage theories, professional guidance available through the AICPA, and prior case law, you should be able to survive the rigorous scrutiny from opposing counsel.

Regardless of which party has retained you, an opposing party will be seeking to discredit your testimony, analysis, and opinion. Preparation, knowledge of relevant professional standards and a thorough command of the facts, methodology, and results of the procedures performed will provide you with a foundation from which you can confidently explain and support the opinion expressed in your report. The following section offers some general tips for providing expert testimony. For additional points to consider, refer to the AICPA's *Quick Reference Guide to Deposition and Trial Preparation and Testimony*.

General Tips for Testimony

It may be helpful to keep these 10 tips in mind during deposition, arbitration, and trial testimony:

1. Always tell the truth.
2. Think before answering.
3. Never answer a question you do not understand.
4. Do not guess or speculate.
5. Do not bring notes, diagrams, books, or other written material unless asked to do so.
6. Listen carefully to each objection made by counsel.
7. Do not argue or become angry or hostile with the examining attorney.
8. Even if a question calls for a "yes" or "no" answer, ask to explain your response if you feel a qualification or explanation is required to complete your answer.
9. Be wary of "absolute" questions such as those that use words like "never" or "any."
10. Do not memorize your answers before the deposition.

Chapter 8

Professional Standards, Regulatory Issues, and Other Leading Practices

The focus of this chapter is on the guidance and regulatory issues that practitioners face when delivering forensic accounting services on behalf of clients. This chapter addresses the professional standards, contractual considerations, and requirements for executing and documenting the various phases of a forensic accounting engagement.

SSFS No.1

Key terms defined in Statement on Standards for Forensic Services (SSFS) No. 1 (FS sec. 100),^{fn 1} are summarized here.

The term *forensic* is defined as “used in, or suitable to, courts of law or public debate.”^{fn 2}

Forensic accounting services^{fn 3} generally involve the application of specialized knowledge and investigative skills by a member^{fn 4} to collect, analyze, and evaluate certain evidential matter and to interpret and communicate findings (forensic services).

SSFS No. 1 provides the standards for providing forensic services, specifically highlighting the general standards of the profession contained in the "General Standards Rule" (ET sec. 1.300.001 and 2.300.001) of the AICPA Code of Professional Conduct. SSFS No. 1 provides guidance that is distinctive in nature to forensic services. These standards are established under the “Compliance With Standards Rule” (ET sec. 1.310.001 and 2.310.001).

SSFS No. 1 addresses that a member performing forensic services should not subordinate his or her opinion to that of any party.

SSFS No. 1 prohibits a member engaged as an expert witness in a litigation engagement from providing opinions pursuant to a contingent fee arrangement, unless explicitly allowed under the “Contingent Fees Rule” (ET sec. 1.510.001).

Finally, SSFS No. 1 emphasizes that the ultimate decision regarding the occurrence of fraud is determined by a trier of fact; therefore, a member performing forensic services, is prohibited from opining regarding the ultimate conclusion of fraud, unless the member is engaged as the trier of fact. A member’s expert opinion may conclude whether evidence is consistent with certain elements of fraud or other laws based on objective evaluation.

^{fn 1} All FS sections can be found in AICPA *Professional Standards*.

^{fn 2} Bryan A. Garner, ed. *Black’s Law Dictionary*, 10 ed., St. Paul, MN: Thomson West Publishing Co., 2014.

^{fn 3} ET section 1.295.140.01.

All ET sections can be found in AICPA *Professional Standards*.

^{fn 4} ET section 0.400.31.

Engagement Letters

The engagement letter is the written contract between you, the client(s),^{fn 5} and possibly others. You, the attorney, the attorney's client, and possibly other parties use the engagement letter to establish an understanding of the services to be performed and to define the responsibilities of each party.

Due Care

The practitioners' general standards require you to exercise due professional care in the performance of professional services. Due care requires diligence and critical analysis of all work performed. It also requires that all work be completed in accordance with the provisions of the applicable professional standards of the AICPA, including the AICPA Code of Professional Conduct.

Competence

The practitioners' general standards require undertaking only those services that can be reasonably expected to be completed with professional competence. Consequently, you may be unprepared to meet client needs adequately in every area and in every phase of litigation engagements. To comply with this standard in providing forensic accounting services, you may need the assistance of other individuals with the required education and experience.

File Documentation

Working papers may assist you in forming an opinion, as an aid to testimony, as well as in supporting consulting advice. Although the working papers of a consultant in litigation may not be subject to discovery, you might consider the following suggestions in anticipation of a potential changed role to expert and resultant working paper discovery.

Working papers should contain information that is needed or relevant to your analysis, final opinion, findings, or testimony. Working papers should not include extraneous information. Generally, unless specified by order, agreement, or state law, litigation working papers, should not include superseded or other information not relied upon or considered as a basis for the opinion.

You should be able to explain the purpose of particular working papers, the working paper format, procedures performed, sources of information, and interrelationships within the working papers.

Some consultants label or stamp working papers as prepared in connection with litigation or under the direction of counsel and subject to the attorney client privilege or attorney work-product rule, or both. If you change roles to an expert and the working papers become subject to discovery, the asserted privileges may no longer be effective.

^{fn 5} Since the development of this practice aid, the AICPA Code of Professional Conduct has updated the definition of *client* to be defined as both engaging entity (typically engaging attorney or attorney's firm) and subject entity (typically attorney's client). Effective December 31, 2017, the term *client* is defined as "[a]ny person or entity, other than the member's employer that engages a member or member's firm to perform professional services (engaging entity) and also, a person or entity with respect to which a member or member's firm performs professional services (subject entity). When the engaging entity and the subject entity are different, while there is only one engagement, they are separate clients." (ET sec. 0.400.07)

Annotations and markings, including highlighting, become part of the working papers; thus, you should consider the following:

- During working paper preparation, a practitioner often is not yet familiar with all-important case facts. You should carefully consider all remarks placed in working papers, as such preliminary conclusions may become superseded by more complete findings.
- Litigation tasks and objectives often change during the course of the engagement. Models and theories developed early in the process may not be those upon which you are called to opine. It is generally acceptable for the content of working papers to evolve during the process of your analysis.
- Documents subject to protective orders should be distinguished from other working papers and documents.

Chapter 9

Using the Work of a Specialist

In the course of an engagement, you may have the need to examine electronic data, obtain a valuation of a property or a business and know other relevant, non-financial information such as who comes into a business or other property after typical business hours. Meeting these information needs may be beyond your training in accounting and auditing, and will typically require the services of a specialist with the requisite skills and experience. Such specialists may include e-discovery or forensic data technology experts, valuation practitioners, or private investigators.

In litigation and forensic accounting engagements when you are retained by counsel, the law firm will often retain the specialist separately from you. In these situations you may make recommendations or assist counsel in selecting the appropriate specialist. Alternatively, the forensic accountant may have a pre-existing relationship with several specialists and may suggest any or all of them for counsel to select.

Regardless of the situation, when you are involved in recommending or selecting a specialist to assist in a forensic accounting engagement, you need to consider the relevant selection criteria that the specialist must have in order to competently perform his or her duties:

- Training
- Education
- Certification
- Experience
- Reputation

Decision to Use the Work of a Specialist

In deciding whether to use the work of a specialist, you should be guided by the "General Standards Rule" (ET sec. 1.300.001) of the AICPA Code of Professional Conduct:^{fn 1}

Professional competence. Undertake only those professional services that the member or the member's firm can reasonably expect to be completed with professional competence.

In the event that an engagement requires knowledge, skills or experience that is outside your expertise, you should assign the task to an appropriate specialist.

^{fn 1} All ET sections can be found in AICPA *Professional Standards*.

Understanding of the Nature of the Work Performed or to be Performed by the Specialist

If the work of the specialist is to be performed under your oversight and control, you should have, at a minimum, a basic understanding of the types of procedures to be performed, and the expected results of such procedures. Upon conclusion of the specialist's work, you should have developed an expectation of what the results will be and be prepared to assess the procedures and results, in order to obtain a comfort level with these results sufficient to allow you to incorporate the specialist's findings into your report or findings expressed at the conclusion of the engagement. This may include performing analytical procedures to determine that the results produced by the specialist are reasonable and complete.

If you are unable to become sufficiently comfortable with the results of the specialist's work, you should identify your concerns with the work produced and (a) request that the specialist perform additional procedures or (b) enlist the services of a different specialist to perform the work in order to address these concerns.

Because auditors and forensic specialists follow different sets of professional standards in performing their work (that is, generally accepted auditing standards versus consulting standards, respectively), special care must be taken to gain comfort that all applicable professional standards are followed. Furthermore, using forensic specialists in a setting that calls for practitioner independence should be carefully evaluated to rule out conflicts or the perception of conflicts.

For the practitioner, the use of specialists is a common occurrence and subject to additional considerations, such as the fact that counsel may have already hired specialists, in which case the potential concerns about recommendations, selection, and independence are moot.

Appendix A

Glossary of Selected Legal and Fraud-Related Terms

admissions. Any statement or assertion made by a party to a case and offered against that party; an acknowledgement that facts are true.

affidavit. A voluntary declaration of facts written down and sworn to by the declarant before an officer authorized to administer oaths, such as a notary public.

allegation. The act of declaring something to be true. Something declared or asserted as a matter of fact, especially in a legal pleading; a party's formal statement of a factual matter as being true or provable, without its having yet been proved.

allege. To assert to be true as described in the previous entry; to make an allegation.

alter ego. A corporation used by an individual in conducting personal business, the result being that a court may impose a liability on the individual by piercing the corporate veil when fraud has been perpetrated on someone dealing with the corporation.

attorney client privilege. The client's right to refuse to disclose and to prevent any other person from disclosing confidential communications between the client and the attorney.

attorney work product rule. The rule providing for qualified immunity of an attorney's work product from discovery or other compelled disclosure.

bates stamp. To affix a mark, usually a number, to a document or to the individual pages of a document for the purpose of identifying and distinguishing it in a series of documents.

bill of indictment. An instrument presented to a grand jury and used by the jury to declare whether there is enough evidence to formally charge the accused with a crime.

bill of particulars. A formal detailed statement of the claims or charges brought by a plaintiff or a prosecutor, usually filed in response to the defendant's request for a more specific complaint.

bribe. A price, reward, gift, or favor bestowed or promised with a view to pervert the judgment of or influence the action of a person in a position of trust.

bribery. The corrupt payment, receipt, or solicitation of a private favor for official action.

Commercial bribery is the knowing solicitation or acceptance of a benefit in exchange for violating an oath of fidelity, such as that owed by an employee, partner, trustee, or attorney.

burden of proof. A party's duty to prove a disputed assertion or charge. The burden of proof includes both the *burden of persuasion* and the *burden of production*." Burden of proof relates to the duty placed upon a particular party in a matter to prove or disprove a disputed fact, or it can relate to which party actually bears this burden. For example, in a civil matter, the burden of proof is placed on the prosecution and the standard is "the preponderance of evidence." In criminal cases, the focus of burden of proof is typically on the plaintiff, who must prove his/her case "beyond a reasonable doubt," but the defendant can be required to establish certain defenses.

chain of custody. The movement and location of real evidence, and the history of those persons who had it in their custody, from the time it is obtained to the time it is presented in court.

check kiting. The illegal practice of writing a check against a bank account with insufficient funds to cover the check, in the hope that the funds from a previously deposited check will reach the account before the bank debits the amount of the outstanding check.

complaint. The initial pleading that starts a civil action and states the basis for the court's jurisdiction, the basis for the plaintiff's claim, and the demand for relief.

conspiracy. An agreement by two or more persons to commit an unlawful act, coupled with an intent to achieve the agreement's objective, and action or conduct that furthers the agreement; a combination for an unlawful purpose.

deceit. The act of intentionally giving a false impression. A false statement of fact made a person knowingly or recklessly with the intent that someone else will act upon it. A tort arising from a false representation made knowingly or recklessly with the intent that another person should detrimentally rely on it.

declaration. A formal statement, proclamation, or announcement, especially one embodied in an instrument. A document that governs legal rights to certain types of real property. An unsworn statement made by someone having knowledge of facts relating to an event in dispute.

defalcation. Embezzlement, loosely; the failure to meet an obligation; a nonfraudulent default.

defendant. A person sued in a civil proceeding or accused in a criminal proceeding.

deposition. A witness's out-of-court testimony taken under oath or affirmation that is reduced to writing or video taped for later use in court or for discovery purposes. The session at which such testimony is recorded. The written or video taped record of a witness's out-of-court testimony.

direct evidence. Evidence in form of testimony from a witness who actually saw, heard, or touched the subject of questioning. Evidence, which if believed, proves the existence of facts at issue without inference or presumption.

embezzlement. The fraudulent taking of personal property with which one has been entrusted, especially as a fiduciary.

evidence. Something (including testimony, documents, and tangible objects) that tends to prove or disprove the existence of an alleged fact. The collective mass of things, especially testimony and exhibits, presented before a tribunal in a given dispute. The body of law regulating the admissibility of what is offered as proof into the record of a legal proceeding. Direct evidence is evidence that is based on personal knowledge or observation and that, if true, proves a fact without influence or presumption.

expert witness. A witness qualified by knowledge, skill, experience, training, or education to provide a scientific, technical, or other specialized opinion about the evidence or a fact issue in order to assist the trier of fact.

false statement. An untrue statement knowingly made with the intent to mislead, such as (1) falsifying or concealing a material fact by trick, scheme, or device; (2) making a false, fictitious, or fraudulent representation; or (3) making a false document or writing.

falsify. To make something false; to counterfeit or forge.

forensic. Used in or suitable to courts of law or public debate.

forgery. The act of fraudulently making a false document or altering a real one to be used as if genuine. A false or altered document made to look genuine by someone with the intent to deceive.

fraud. A knowing misrepresentation of the truth or concealment of a material fact to induce another to act to his or her detriment. A misrepresentation made recklessly without belief in its truth to induce another person to act. A tort arising from a knowing misrepresentation made to induce another to act to his or her detriment.

fraudulent concealment. The affirmative suppression or hiding with the intent to defraud, of a material fact or circumstance that one is legally bound to reveal.

fraudulent conversion. Conversion that is committed by the use of fraud, either in obtaining the property or in withholding it.

fraudulent misrepresentation. A false statement that is known to be false or is made recklessly — without knowing or caring whether it is true or false — and that is intended to induce a party to detrimentally rely on it.

hearsay. Traditionally, testimony that is given by a witness who relates not what he or she knows personally, but what others have said, and that is therefore dependent on the credibility of someone other than the witness. In federal law, a statement (either a verbal assertion or nonverbal assertive conduct) other than one made by the declarant while testifying at the trial or hearing, offered in evidence to prove the truth of the matter asserted.

indicia. Evidence; signs; indications.

indictment. The formal written accusation of a crime made by a grand jury and presented to a court for prosecution against the accused person. The act or process of preparing or bringing forward such a formal written accusation.

kickback. A return of a portion of a monetary sum received, especially as a result of coercion or a secret agreement.

lapping. An embezzlement technique by which an employee takes funds from one customer's account receivable and covers it by using a second customer's payment to fund the first account and so on.

larceny. The unlawful taking and carrying away of someone else's personal property with the intent to deprive the possessor of it permanently.

mail fraud (18 USC 1341). Originally, an act of fraud using the U.S. Postal Service, as in mailing false representations through the mail to obtain an economic advantage. It has since been expanded to include private or commercial interstate carriers.

malfeasance. A wrongful or unlawful act, especially wrong doing or misconduct by a public official.

misapplication. The improper or illegal use of funds or property lawfully held.

misappropriation. The application of another's property or money dishonestly to one's own use.

no bill. A grand jury's notation that insufficient evidence exists for an indictment on a criminal charge.

perpetrator. A person who commits a crime or offense.

ponzi scheme. a fraudulent investment scheme that takes its name from Charles Ponzi, who in the late 1920's was convicted for fraudulent schemes. The scheme involves taking money from a later investor that generates high dividends or returns for the early investors.

presumption. A legal inference or assumption that a fact exists, based on the known or proven existence of some other fact or group of facts.

prima facie evidence. Evidence that will establish a fact or sustain a judgment unless contradictory evidence is produced.

relator. The real party in interest in whose name a state or an attorney general brings a lawsuit. The applicant for a writ, especially a writ of mandamus, prohibition, or quo warranto. A person who furnishes information on which a civil or criminal case is based; an informer.

rules of evidence. "The rules governing the admissibility of evidence at trials in federal courts."^{fn 1} The Articles of the Federal Rules of Civil Procedure include the following titles, which are of particular applicability to the practice of forensic accounting:

- Article IV. Relevance and Its Limits
 - Rule 401. Test for Relevant Evidence
 - Rule 402. General Admissibility of Relevant Evidence
 - Rule 403. Excluding Relevant Evidence for Prejudice, Confusion, Waste of Time, or Other Reasons
- Article V. Privileges
 - Rule 501. Privilege in General
 - Rule 502. Attorney-Client Privilege and Work Product; Limitations on Waiver
- Article VII. Opinions and Expert Testimony
 - Rule 701. Opinion Testimony by Lay Witnesses
 - Rule 702. Testimony by Expert Witnesses
 - Rule 703. Bases of an Expert's Opinion Testimony
 - Rule 704. Opinion on an Ultimate Issue
 - Rule 705. Disclosing the Facts or Data Underlying an Expert's Opinion

^{fn 1} www.law.cornell.edu/rules/fre

— Rule 706. Court-Appointed Expert Witnesses

subpoena. n., A writ commanding a person to appear before a court or other tribunal, subject to a penalty for failure to comply; to call before a court or other tribunal by subpoena.

target offense. The crime that is the object of the defendant’s attempt, solicitation, conspiracy, or complicity.

target witness. A witness who is called before a grand jury and against whom the government is also seeking an indictment.

true Bill. A grand jury’s notation that a criminal charge should go before a petit jury for trial.

waiver. The voluntary relinquishment or abandonment — express or implied — of a legal right or advantage (for example, waiver of privilege, waiver of counsel, or waiver of immunity).

white collar crime. A nonviolent crime usually involving cheating or dishonesty in commercial matters.

witness. One who sees, knows, or vouches for something. One who gives testimony under oath or affirmation (1) in person, (2) by oral or written deposition, or (3) by affidavit.

Appendix B

Legal References Related to Selected Criminal Violations Associated With Fraud

The following listing of legal references to selected criminal violations related to fraud is presented for illustrative purposes only and is not necessarily exhaustive.

<i>Criminal Violation Reference</i>	
Bankruptcy fraud	Title 18 USC Sections 15–157
Computer fraud	Title 18 USC Sections 1030, 1037, 2701
Procurement fraud	Title 18 USC Sections 3729–3733
Racketeer Influenced and Corrupt Organizations Statute	Title 18 USC Sections 1961–1968
Bank fraud	Title 18 USC Sections 1014, 1032, 1344
Tax fraud	Title 26 USC Sections 7201, 7203, 7205, 7206,
Tax shelter fraud	Title 26 USC Section 6111
Management and financial statement fraud	Title 15 USC Section 7201
Foreign Corrupt Practices	Title 15 USC Section 78

Other relevant legislation related to financial fraud includes the following:

- Sarbanes Oxley Corporate and Auditing Accountability and Responsibility Act
- Dodd Frank Wall Street Reform and Consumer Protection Act

Appendix C

Illustrative Paragraphs Describing the Scope of Work for Engagement Letters

Each fraud investigation engagement is different. Therefore, it is not possible to develop standard paragraphs describing the scope of work for engagement letters for fraud investigations. However, each report should contain a summary of the bases upon which the investigation is initiated and a general description of the work that is to be included. The level of detail of the description will vary depending on the information available as of the engagement letter date and the CPA's knowledge about the client's operations and accounting system. The following sample paragraphs illustrate how the scope of work could be described in engagement letters for fraud investigations.

Sample 1

It is our understanding that you received an anonymous letter alleging that the president of your Anytown subsidiary owns the printing company that Anytown subsidiary uses for its printing purchases ("Vendor"). In addition, the letter alleges that excessive prices have been paid to the Vendor during the last three calendar years, especially when compared with prices charged by other comparable printing companies for the same type of work. You have asked us to investigate these allegations. We expect to search public records to determine the ownership of the Vendor, schedule the invoices submitted by the Vendor noting the products received (or services performed) and prices paid, and obtain quotes of prices charged by other comparable printing companies for the same products (services) purchased from the Vendor. As sometimes occurs in these types of investigations, we may identify other possible improprieties and different avenues for investigation. We will keep you informed of our findings, and we will discuss with you any changes in the scope of our investigation that results from our preliminary findings prior to undertaking additional procedures to investigating other possible improprieties noted.

Sample 2

It is our understanding that your accounting department has uncovered a material difference between the amount of accounts receivable in the general ledger and the detailed listing of accounts receivable ("customer's subsidiary ledger") as of the end of your last fiscal year. You are concerned that, in addition to this difference, the amounts noted in the customer's subsidiary ledger may also be inaccurate. You have asked us to investigate this difference and verify the accuracy of the existing customers' subsidiary balances. We will confirm the balances in the customer's subsidiary ledger and search for the entries that caused the difference between the general ledger balance and the accounts receivable subsidiary ledger. We will also attempt to determine the cause for any differences. Because this type of investigation includes following leads that develop during the course of the engagement, we may expand the scope of our work to trace leads to their ultimate resolution. This expansion of scope will only occur after we discuss and gain your approval to perform the additional procedures with you.

Sample 3

It is our understanding that you recently determined that your physical inventory as of the end of your last fiscal year is significantly less than shown on your inventory records, and you have asked us to assist you in determining the cause for the difference. We will test this physical inventory to determine its accuracy and will gain an understanding of the accounting and physical controls over inventory. We will also interview your employees who handle the physical inventory or who are responsible for the inventory records. After completing these activities, we will suggest additional procedures that we believe

may help to resolve this issue and identify the cause for the difference. We will also suggest improvements to the current systems to help prevent a recurrence.

Sample 4

Our work, to be performed under your direction, will consist of analyzing the available information in the above-referenced matter to help you render legal advice to your client and to perform other tasks that may be identified during the course of this engagement. If at any time during this engagement indicia of fraud are discovered, we will cease work and communicate to you our findings. You agree to retain independent outside counsel, and accordingly, we shall be retained by whomever you should so choose. If we agree to serve as expert witnesses at trial, upon your determination that such testimony is necessary, that work will be the subject of a separate engagement letter.

Sample 5

It is our understanding that a counterparty self-disclosed to you that they accelerated the collection of management fees in violation of their agreement with you. You have requested that we provide forensic accounting services to you in this matter relating to associated entities ABC Corporation, ABC Master Holding Company, LLC, and ABC Holding Company, LLC (collectively the "ABC Group"). We will provide forensic accounting services in a phased approach as outlined in the following sections.

Phase 1 — Initial Assessment

Phase 1 is intended to be exploratory in nature and limited in scope. The overall goal of phase 1 will be to assess the current environment and determine the availability and usefulness of information for purposes of further analysis. Procedures in phase 1 will include the following:

- Interview ABC Group personnel in an effort to gain an understanding of the following:
 - Entities' various business activities and how these activities have changed over time
 - Structure and interrelationship of relevant legal entities and how that structure has changed over time
 - Nature, form, structure, and availability of general ledger accounting detail for the various relevant legal entities
 - Availability of bank account statement detail for the various relevant legal entities
- Assess our ability to (and the anticipated usefulness of) conduct forensic data analysis on the available general ledger accounting detail
- Prepare a project plan and cost estimate for phase 2 based upon what has been learned in phase 1

We estimate the professional fees associated with phase 1 will not exceed \$XX,XXX.

Phase 2 — Forensic Data Analysis

At your direction, we will undertake phase 2. The overall goal of phase 2 will be to conduct forensic data analysis procedures on the general ledger accounting detail provided by the ABC Group. The specific procedures associated with phase 2 will be defined at the end of phase 1 but are likely to include the following:

- Verify the completeness of the general ledger accounting detail
- Verify that the general ledger accounting detail appears to be consistent with the representations made by ABC Group personnel during phase 1
- Identify material flow of funds between the various legal entities
- Perform data analytic procedures intended to identify anomalous activity that may require further investigation in phase 3
- Prepare a project plan and cost estimate for phase 3 based upon what has been learned in phase 1 and phase 2

Phase 3 — Operational Assessment

At your direction, we will undertake phase 3. The overall goal of phase 3 will be to assess the operational environment of the ABC Group with a deliberate focus on the flow of funds between legal entities and identification of actions undertaken by ABC Group personnel that may be indicative of efforts to disguise the true business purpose for the flow of funds between entities. The specific procedures associated with phase 3 will be defined at the end of phase 2 but are likely to include the following:

- Analyze documentation (and representations from ABC Group personnel) that supports the material flow of funds between the various legal entities identified in phase 2
- Analyze documentation (and representations from ABC Group personnel) that supports the anomalous activity identified in phase 2
- Gain an understanding of ABC Group's internal control environment over accounting activities and provide relevant observations and recommendations for improvement

Appendix D

Common Asset Misappropriation Fraud Schemes

The following fraud schemes are described for illustrative purposes only and do not represent a comprehensive set of fraud schemes. These schemes have been listed by the type of scheme being disbursement-related, receipt-related, and corruption-related. In order for the forensic accountant to adequately design procedures, he or she must understand whether the scheme is on- or off-the-books because the approach and investigation may vary.

Disbursement Related

Check Fraud

There are two types of check fraud in this scheme category. The first common form of check fraud occurs when an employee who is authorized to create and sign the check writes checks for his or her personal benefit. Often, the checks are made payable to the individual perpetrator or to pay for a personal expense (such as the perpetrator's credit card company or family member), then alter the payee name in the electronic accounting records to make the disbursement appear to be to a legitimate authorized vendor.

The second type of check fraud occurs when checks are forged by a person who is not authorized to create or sign checks. The perpetrator either obtains check stock or intercepts signed checks from the outgoing mail and makes them payable to cash, a shell entity, or self. In the case of the mail intercept, the perpetrator uses ink washing techniques to alter the payee or dollar amount.

Both of these schemes are considered on-the-books and may be identified through timely bank reconciliations that include comparison of the canceled checks to the accounting system.

Billing and Fictitious Vendors

The addition of a fictitious vendor to a vendor master file in an accounts payable system is the first step toward committing a successful cash disbursement fraud. Unless a perpetrator of fraud can ensure that the vendor exists in the system, it will not be possible to process bogus invoices for payment to the vendor. But once established, invoices can be entered for payment either directly by the perpetrator or by another individual in collusion.

The most common schemes of this type include the perpetrator (*a*) forming a shell company to submit fictitious invoices to the victim organization, and (*b*) double paying legitimate vendor invoices and intercepting and converting the second over-payment. (See also "Kickback," which is a form of vendor billing fraud where the vendor works in collusion with the inside perpetrator.)

For this reason, it is imperative that maintaining the vendor master file and the ability make accounts payable disbursements are segregated duties. Furthermore, additions or changes to the vendor master file should be reviewed on a timely basis to ensure that only valid vendors have been set up.

Payroll and Ghost Employees

In the payroll area, ghost employees are the fictitious vendors of fraud. Ghosts can be actual employees who never show up for work, nonexistent employees who have been added to the payroll file in the

same manner as fictitious vendors, or an individual who has left the employ of the company but remains on the payroll. Individuals must have the authority to approve additions to the master file or the ability to input these transactions, or both.

To facilitate the existence of ghosts, employment files are created, altered, or otherwise maintained to validate employment. Records of work activity (for example, time cards and electronic sign-ins and sign-outs) must continually be prepared and processed. Payroll checks are usually intercepted by the perpetrator and diverted into his or her bank account. Direct deposits of payroll funds make detection of ghosts much more difficult, especially in newer systems that provide pay stubs electronically instead of in hard copy for distribution.

Payroll and Overpayment to Employees

Another type of payroll disbursement fraud includes the overpayment to employees for time that was not worked but was reported as worked. These are actual employees who may be working in collusion with their supervisor or simply employees whose timesheets are not reviewed by a supervisor. This is more commonly an issue for a firm that has a small number of employees across a variety of geographic locations.

Expense Reimbursements

Compared with the other schemes, most frauds are perpetrated against a company through expense reimbursements because it is the area where the most people have access to the process. More people travel or entertain than those who handle cash receipts, post journal entries, or prepare payrolls. As such, there are also more ways to abuse this system than in other areas. Auditors and forensic accountants can spend hours relating the variety of methods they have uncovered to perpetrate this type of fraud.

Some of the popular ways that individuals commit fraud in the reimbursement process are as follows:

- Submitting personal expenses as business expenses (for example, requesting reimbursement for gas for a personal vehicle and claiming it was for a company vehicle)
- Using tear-off receipts (usually found at the bottom of restaurant checks) and writing in overstated amounts in support of meal expenses
- Misstating the number of attendees at an event in order to support a higher per person expense (for example, a \$250 dinner with a colleague becomes a dinner with two or three clients)
- Duplicate submission (for example, airline ticket submitted with an expense report is submitted again on a credit card statement)
- Nonexpenditures (documentation of fictitious expenses submitted for reimbursement)
- Falsely completed receipts (for example, blank taxi or parking receipts)
- Altered receipts showing evidence of redaction fluid or other text alteration
- Photocopies of receipts and other supporting documents

Companies must be diligent in their review of documentation supporting reported expenses.

In addition to the preceding reimbursement frauds, new technology in printers, copying machines, and the like make it possible to produce original receipts that are virtually undetectable. Close scrutiny of receipts and comparison to the itinerary or whereabouts of the reporting individual are essential. Copies of receipts should never be permitted unless the reason for the copy is fully explained and approved prior to reimbursement.

Receipt Related

Skimming

Skimming occurs when cash is removed prior to being recorded in the recordkeeping system in any fashion. Cash businesses, such as retail establishments, are most susceptible to this activity. A sale paid for in cash but never rung up on the cash register leaves no trace of the transaction. Directing the cash to one's pocket instead constitutes skimming. No record of the sale or the receipt of the cash will exist.

An interesting aspect of skimming is that if it is done by a business owner, it can be referred to as "tax evasion" because the income would not be reported on a tax return. If it is performed by an employee, it is both "tax evasion" and "stealing." Skimming is the primary reason that strict internal controls or appropriate compensating controls are needed in organizations that deal with large amounts of cash.

Check Kiting

Check kiting, one of the more common types of employee embezzlement, involves the transfer of money between bank accounts and the improper recording of these transfers. In check kiting, the perpetrator takes advantage of the "float" period, which is the time between the date the check was deposited and the date that the funds are collected. The perpetrator deliberately uses the same funds in two or more banks to build apparently large balances. Check kiting can involve numerous banks and checks. The more banks and broader geographical distance involved, the harder the check kiting is to control.

Lapping

Lapping is one of the most prevalent types of internal fraud relating to accounts receivable. Lapping is a method of concealing a defalcation wherein a customer's payment is recorded sometime after payment receipt. The general lapping scheme is as follows. Cash or a bank check received from a customer is appropriated by the employee. At a later date, funds received from a second customer are credited to the first customer's account, and the second customer's account is credited still later by funds received from a third customer. As a result, there is a delay of credits, namely lapping. The lapping will continue until the fraud is detected, the funds are restored, or the scheme is covered up, for example, by a credit to the proper customer and a fictitious charge to operating accounts. Lapping schemes may involve fund diversions for an employee's personal use or to pay other expenses to keep the business operating. Often, a lapping scheme involves falsification of documents to conceal the misappropriation of funds.

Corruption Related

Bid Rigging

The competitive bidding process is conducted in order for the buyer to secure the best possible pricing for the work or product desired. However, bid rigging schemes actually result in the buyer paying more for the goods or services.

Most bidding procedures call for bids to be submitted in sealed envelopes to ensure the integrity of the bid process. Although the bids may be sealed, collusive efforts can take place prior to their submission that negate the expected benefits of the bid process and, in fact, escalate costs to the buyer.

Bid rigging can take place in different forms. For instance, if expected bidders fail to submit a bid because the potential bidders have already decided who the winner will be, there is no incentive for the winner to submit the lowest possible bid. Or, conversely, the other bidders can purposely submit bids much higher than the winning bid, giving the appearance to the buyer that the best possible bid was obtained. In schemes such as these, the bidders will rotate themselves to be the winners, and, in many cases, the non-winners will end up as sub-contractors at prices much higher than normal.

Kickback

The Anti-Kickback Enforcement Act of 1986 defines a kickback as anything of value provided improperly to obtain or reward favorable treatment in connection with contract actions. In the commercial sense, kickbacks are the giving or receiving of anything of value to influence a business decision without the employer's knowledge and consent.

A kickback is a form of off-book fraud. The term *off-book* refers to those schemes in which the funds used for illegal payments or transfers are not drawn from the regular company bank account of the payer, and the payments do not appear on the payer's books and records. If the employee responsible for the purchasing function of a company is receiving kickbacks, the company usually is paying more than competitive prices for products or services. The financial statements may reflect reduced net income and overstated inventory values.

Other

Bustout

A bustout scheme can take many different forms. The basic approach is for an apparently legitimate business to order large quantities of goods on credit, dispose of those goods through either legitimate or illegal channels, and then close shop, absconding with the proceeds and leaving suppliers unpaid.

Bustout schemes are often perpetrated by individuals soon after the formation of a new company or through the takeover of an existing company and are accomplished as follows:

1. Credit is established with numerous vendors, and initial payments are made promptly. Vendors therefore feel comfortable with the company and extend existing credit lines.
2. The perpetrators build inventory by ordering everything possible from vendors (regardless of the type of products), promising to pay soon, and ordering more merchandise.
3. The perpetrators sell the inventory at deep discounts or move it to another related business before vendors can repossess it.
4. The business fails or just closes and, perhaps, files bankruptcy unless creditors take preemptive legal action.

Ponzi

A Ponzi, or pyramid, scheme is usually a venture wherein earlier investors are repaid principal plus interest with funds provided by later investors. There may or may not be a legitimate business purpose for

the venture, but the need for capital creates and continues the scheme. Often, unusually high investment returns or other inducements are offered by the promoters to attract investors.

Each Ponzi scheme typically shares three common characteristics:

1. The business activity depends on outside investor money.
2. The investor money is not used according to the stated purpose. Some of the investor money is used to pay the returns promised to earlier investors.
3. The business enterprise lacks profits sufficient to provide the promised returns and, therefore, depends on an ever-increasing supply of investor money.

Recent high profile Ponzi scheme convictions have led to legal action initiated by the trustee (for the perpetrator's bankrupt estate) seeking to "claw back" the gains enjoyed by earlier investors. Often forensic accountants may be called upon to compute the net equity of the individual investor accounts in order to identify those net winners who may be subject to claw back claims.

Appendix E

Non-Exhaustive List of Common Financial Statement Fraud Schemes and Related Red Flags

Revenues-Related Schemes

Improper revenue recognition is the most prevalent type of financial statement fraud. According to the Committee of Sponsoring Organizations of the Treadway Commission (COSO), from 1998 to 2007, revenue frauds accounted for 60 percent of SEC financial reporting fraud cases. Revenue fraud refers to the intentional recording of revenue for transactions that did not occur or did not meet revenue recognition criteria.

There are two broad categories of revenue recognition fraud: timing and fictitious sales. Timing involves GAAP violations due to recording revenue before all recognition criteria are met. Fictitious sales involve creating or altering documentation to give the appearance that a transaction occurred.

Channel Stuffing

Channel stuffing refers to the offering of concessions such as extended payment terms or additional rights of return to entice a customer to purchase goods it may not have otherwise bought. While doing so may serve a business purpose, consideration must be given to its revenue recognition implications, particularly if side letters are used (which may limit transparency of the terms of the transaction) or if there are high rates of return after period end. Further, consideration should be given to whom the goods are being sold. Channel stuffing is more prevalent when revenue is recognized upon sale to a distributor ("sell-in" transactions) as opposed to when revenue is recognized upon sale from the distributor to the end-user ("sell-through" transactions). For example, many companies sell to distributors. In need of additional sales to meet revenue targets by year end, a company may pressure the distributor to buy products far in excess of demand and offer unconditional rights of return. These additional incentives can result in the risk and rewards of ownership not passing to the customer, and revenue recognition may be inappropriate upon sale to the distributor.

Conditional Sales (Including Consignment Sales)

Conditional sales arise when side letters or other arrangements remove a customer's obligation to keep a purchased good. Similarly, inventory may be sold on consignment, in which case the consignee is not obligated to pay until the goods are sold to another party. In these circumstances, revenue recognition may not be appropriate until the risks and rewards of ownership have passed to the customer.

Bill and Hold or Recognizing Before Shipment

There are specific, stringent accounting rules that permit revenue recognition when the specific provisions are met. Companies can execute schemes in which they attempt to give the appearance that goods have been shipped when they have not. The entity may bill the goods but never ship them or ship them to another internal warehouse until the customer is willing to accept delivery.

Cut-off

In most cases, fraudulent revenue recognition related to cut-off results from keeping the books open to record a transaction that occurs after the period end date. For example, a company may attempt to record a transaction which occurred on 1/01/20X1 in the books for the period ending 12/31/20X0.

Backdating

An entity may date an agreement prior to when it was executed. Doing so could be used to give the appearance that the terms were fixed before they actually were.

Recognition Before All Revenue Recognition Criteria Are Met

An entity may attempt to recognize revenue before it has met all of the criteria for revenue recognition. For example, an entity may make a partial shipment of an order but recognize all of the revenue associated with that order. Similarly, an agreement may involve (a) multiple deliverables for which customer acceptance requires completion of all deliverables, or (b) be documented in multiple contracts which need to be considered together in order to determine whether the revenue recognition criteria have been met. Under such arrangements, revenue recognition may not be appropriate until all revenue recognition criteria have been met.

Sham Sales

An entity may falsify accounting records in an attempt to conceal fraud. The goods associated with these fictitious sales may be shipped to another location or otherwise hidden to give the appearance that the goods were sold.

Round-Tripping

An entity may supply its customer the funds to pay for purchased goods by entering into transactions with no economic substance. For example, a manufacturer may sell goods to a customer that the customer did not need or want, or it could not afford. The manufacturer may finance the transaction for the customer by simultaneously purchasing services from the customer that are never provided.

Unauthorized Shipment

An entity may ship and recognize revenue for goods the customer did not order or before a customer is willing to accept delivery. This may also involve intentionally shipping defective products and recording revenues even though the seller knows the goods will be returned.

Revenues-Related Red Flags

Red flags are trends, or anomalies in transactions or account balances or relationships between financial and non-financial information that might be considered indicia of fraud. Based on the nature of the red flags encountered, performing analytical and other procedures may provide insight to suggest various fraud schemes that may require further inquiry. Some examples are as follows:

- Consistently meeting or exceeding consensus forecast revenues or consistent revenue growth rates over an extended period of time
- Large transactions near period end

- Manual journal entries entered near period end, particularly those entered by upper management
- Aggressive "tone at the top" with a strong emphasis on meeting earnings targets.
- Contracts with unusual terms and conditions
- Significant transactions with related parties or new customers
- Identification of conflicts of interest between a customer and management or other personnel
- Evidence of backdating or alteration of documents
- Inconsistencies between logically related accounts (for example, fixed assets and depreciation expense)

Expenses-Related Schemes

Another common type of financial statement fraud involves the understatement of expenses, typically for the purpose of inflating the bottom line. Understatements of expenses typically involve improper capitalization of expenses or misclassification of expenses within the income statements. Some common expense-related financial statement fraud schemes are listed in the following sections.

Reclassification of Cost of Goods Sold (COGS) to Operating Expense (OPEX)

Gross margin is a metric looked at closely by investors, analysts or others looking to evaluate the performance of an entity. To overstate gross margin, a company may reclassify costs from COGS to OPEX.

Channel Incentives and Rebates

An entity may offer volume rebates, early payment discounts or other discounts which could affect the actual amount of revenue earned or expenses incurred. Rebates received by customers are generally recognized as reductions of cost of goods sold. A customer may attempt to recognize such rebates before they are earned

Cookie Jar Reserves

To "smooth" earnings from year to year, management may intentionally overstate provisions for expenditures related to litigation and other contingencies, acquisitions, severance, or other provisions that may impact future periods. In future years when earnings are lower than analyst expectations, bonus targets or other relevant metrics, management may take from the "cookie jar" to boost income.

Capitalization of Expenses

A number of well-publicized fraud schemes have involved the inappropriate capitalization of expenses. A simple scheme involves improperly capitalizing routine maintenance, operating expenses, or general and administrative expenses. More complex schemes involve the misapplication of GAAP which allows capitalization of costs under certain criteria and disallows in other situations, for example the inappropriate capitalization of research and development costs, interest costs, or software development costs.

Gross Versus Net Recognition

Whether revenues should be recognized gross or net of expenses depends on whether an entity is considered the principal or the agent. In general, an entity functioning as agent should record revenues net of any expenses. An entity attempting to record revenues on a gross basis may intentionally misrepresent its business purpose and give the appearance that it is acting as a principal.

Expense-Related Red Flags

- Consistently meeting or exceeding consensus pre-tax earnings or consistent earnings growth over an extended period of time.
- Unusual increase in gross margin or margin in excess of industry peers
- Identification of significant or large volumes of expenses being recorded in incorrect periods
- Inability to justify activity in reserve accounts

Balance Sheet Schemes

These frauds are primarily carried out to manipulate the balance sheet, affecting the entity's reported financial ratios, the liquidity, or the long term solvency to the financial statement users. These schemes often have a corresponding impact on the income statement.

Concealed Liabilities

A variety of methods can be used to inappropriately conceal liabilities. Some examples of schemes that can be employed to conceal liabilities include

- omitting invoices from accounts payable;
- failure to record notes payable or other long term debt obligations;
- failure to accrue for contingent liabilities that are estimable and probable;
- concealing debts through improperly unconsolidated off balance sheet vehicles; and
- concealing future lease obligations through failure to record obligations.

Valuation

One of the assertions that management makes when recording an asset or liability is the proper valuation of that asset or liability, meaning the balances are recorded at the appropriate amount with adjustments made as necessary. There are a number of schemes that management can employ to fraudulently state the valuation of assets and liabilities including

- failure to record known impairments on fixed assets, inventory, intangible assets and goodwill;
- using inflated fair value measurements;
- improper investment valuation; and

- improper valuation of business combination assets and liabilities.

Inventory

Inventory accounts can be susceptible to a number of fraud schemes. Inventory valuation schemes can include either recording inventory at market value in excess of cost, failing to write down inventory to market when below cost or inappropriately capitalizing costs, such as unrelated general and administrative costs, into inventory. A number of inventory schemes involve tricks to inflate the inventory quantities. This can be done by any number of ways: counting empty boxes as full, moving inventory to various locations in order to double count, or simply making upward adjustments to the count in the system. These schemes may result in both an inflation of current assets and net income in the current period.

Fictitious Assets

Booking fictitious items are simple schemes to boost the appearance of the financial condition of the company. Cash is a common account that is used to book fictitious balances, but management can record fictitious investments, prepaid expenses, fixed assets or other assets to inflate the balance sheet or to conceal fraudulent overstatements of net income, or both.

Misappropriation of Assets

The focus thus far has been on financial reporting schemes, but it is possible for other schemes to create financial reporting issues. Material asset misappropriation schemes that are not reported on the financial statements can lead to a material misstatement on the financial statements. For example, a corporate executive or director might inappropriately take out an unauthorized personal loan from the company and then fail to disclose the transaction in the financial statements. Such a scheme is not only a misappropriation of company assets, but if material, represents a significant financial reporting issue for failure to report both the related party transaction and the obligation itself. Other situations may involve the manipulation of records to conceal theft of company assets while materially misstating financial statements.

Balance Sheet Red Flags

- Recurring negative cash flows from operations or inability to convert earnings growth into cash flow.
- Assets, liabilities, revenues, or expenses based on significant estimates and difficult to corroborate.
- Unusual or significant increases in the prepaid expense account or other asset balances. This could indicate that expenses are being placed on the balance sheet instead of properly being recognized in the current period.
- Unusual or significant increases in deferred revenue or other liability balances. This could indicate that sales are being placed on the balance sheet for a "rainy day" instead of being recognized properly in the current period.
- Nonfinancial management's excessive participation or preoccupation with selection of accounting principles or significant estimates.
- Unusual increase in gross margin or margin in excess of industry peers.

- Allowances (sales returns, warranty claims, bad debts, obsolete inventory, and the like) declining as percentage of sales without clear reason.
- Unusual reduction in the number of days purchases remain in accounts payable, especially if competitors are stretching payments to vendors.
- Significant declines in market demand for products or increasing business failures in the industry or broader economy.
- Unusual changes in relationship between fixed assets and depreciation expenses.
- Capital and asset growth while competitors are reducing capital tied up in assets.

Significant Management Estimates

Overview

Many accounts within the financial statements are subject to management estimates, which by their nature include subjective factors that can prove to be more challenging to validate than simple transactions supported by a document such as an invoice. These characteristics lead such accounts to be more susceptible to fraud, such that auditing standards require auditors to place increased attention towards management estimates.

A number of industries and businesses engage in practices that require making estimates of future obligations in order to ensure proper matching of revenue to expenses. A common example is an allowance for doubtful accounts. Other accruals may include allowances for returns, sales allowances, loan loss reserves, and warranty liabilities. Fraud may occur when biases cause management to use either overly optimistic or overly conservative assumptions to manipulate these estimates and ultimately the account balances. Inappropriate assumptions may include purposefully under estimating product failure rates, manipulation or intentional misinterpretation of historical data, overly optimistic collection assumptions, or ignoring specific data such as bad economic indicators affecting customers.

GAAP requires expenses to be recorded when they are incurred, estimable, and probable. Sometimes these expenses require a significant amount of judgment to determine whether they rise to the level of being recorded or disclosed. Fraudulent schemes include failure to record or disclose known expenses that have been incurred or using manipulated data or fraudulent assumptions to record a biased estimate.

Accounting standards require use of fair value in a number of situations. A number of fair value calculations require the use of subjective data. Depending on the models used, such data might include discount rates, cash flow forecasts, growth rates, public company comparables, and any number of other subjective inputs. Even the decision of which fair value models to utilize involves some level of management discretion. A financial reporting fraud scheme would unfold if management manipulates these estimates or decisions in order to achieve a certain outcome.

Finally, management could fraudulently manipulate the periodic depreciation or amortization charged by manipulating estimates like the useful life or salvage value of long lived assets.

Management Estimates Red Flags

- Recurring negative cash flows with concurring positive net income and earnings growth
- Inability to corroborate significant management estimates

- Frequent or unsubstantiated changes to management's methods or models used for making significant accounting estimates
- Excessive involvement, preoccupation of nonfinancial personnel or lack of appropriate review in selection of accounting principles or estimates
- Unusual trends in gross margin
- Unusual trends for allowance with respect to industry peers
- Reduction of accounts payable days outstanding while competitors are stretching out payments to vendors

Other Financial Statement Schemes

Improper Disclosures

GAAP requires a number of footnote disclosures to ensure users of the financial statements have a more complete understanding of the financial information. There are vast disclosure requirements that can vary by industry or company. Some of the more significant disclosures that can be subject to fraud include the following:

- Failure to disclose related party transactions
- Failure to disclose subsequent events
- Failure to disclose accounting changes, changes in estimates, or error correction
- Failure to disclose debt covenants
- Failure to disclose contingent liabilities, such as failure to disclose potentially material penalties related to anti-corruption or other regulatory violations
- Improper disclosure of company description, products, market environment, regulatory environment, and other relevant operating information

Improper Classification

Another important assertion inherent in the financial statements is the proper classification of account balances. Fraudulently manipulating the classification of accounts can mislead users of the financial statements on the financial condition of the company. The accuracy of many financial ratios is dependent on the appropriate classification between current and non-current accounts. For example, manipulation of liabilities from current to non-current accounts or assets from non-current to current accounts would overstate the liquidity of the entity. Investment classification can be manipulated in a number of ways by management including the following:

- Improper classification of investments as cash equivalents, overstating liquidity
- Improper classification of trading, available for sale, and held to maturity securities
- Improper categorization of the valuation hierarchy assigned to instruments

- Improper categorization of cash flows including (a) recording cash inflows from financing as cash inflows from operating activities to improve appearance of operations or (b) recording cash outflows from operating activities as investing activities to improve appearance of operations and investments in the business

Stock Compensation and Executive Compensation

Another fraud scheme may involve failing to adhere to the reporting requirements associated with stock compensation and executive compensation in order to hide potentially excessive or unauthorized executive compensation.

Compensation Red Flags

- Ineffective board of directors or audit committee oversight over financial reporting process
- Domination of reporting process by small number of people with minimal oversight or other compensating controls
- Known history of attempts to violate securities laws
- Recurring attempts by management to justify marginal or inappropriate accounting on the basis of materiality
- Significant related party transactions not in the ordinary course of business Transactions with related entities not audited or audited by another firm
- Ineffective communication among management and with the board of directors and audit committee
- Undo restriction on auditor access to key individuals and reducing effective communication with the board and audit committee

Appendix F

Fraud Theories

AU-C section 240B, *Consideration of Fraud in a Financial Statement Audit*,^{fn 1} noted that fraud "is a broad legal concept,.... [a]lthough the auditor may suspect or, in rare cases, identify the occurrence of fraud, the auditor does not make legal determinations of whether fraud has actually occurred." The same prohibition applies to forensic accountants. AU-C section 240B also states that fraud is distinguished from error by whether or not the underlying action that gave rise to the misstatement is intentional or unintentional.

Several theories regarding the combinations of conditions are generally present in instances of fraud. An understanding of these theories and the ability to recognize the attendant conditions as indicia of fraud are central to a forensic accountant's skill set.

The Fraud Triangle

This is a three-pronged theory of fraud, whereby three facets need to be present for fraud to occur; specifically, pressure (incentive), together with opportunity and rationalization. The fraud triangle originated from a hypothesis put forth by Donald Cressey:

Pressure (Incentive). Pressure, such as a financial need, is often cited as the reason for committing the fraud. Depending on the context, these pressures can be either personal or entity based. Personal pressure may come from an individual spending more than he or she is earning, a spouse losing a job, or gambling or drug issues; this personal pressure leads to the individual(s) committing embezzlement or other asset misappropriation schemes. Entity pressures may be the result of having to meet earnings expectations or the need for senior management to meet certain goals in order to receive incentive compensation awards. These results would be achieved through financial statement fraud such as revenue recognition, earnings management, and other schemes.

Rationalization. In order to justify his or her actions, the person committing fraud will rationalize such actions. These rationalizations may include "I only borrowed the money and was intending to pay it back" or "They are a big company and won't miss the funds" or "I'm not being paid enough in my job." Entity-based rationalization may include "The company won't survive if we miss earnings again" or "We won't get the loan if our assets don't exceed \$X."

Opportunity. If internal controls are weak and the perpetrator knows this, he or she may believe no-one will notice if funds are taken. In many cases, the system may be "tested" with small amounts; the amounts become larger as the expectation of getting caught become lower.

^{fn 1} All AU-C sections can be found in AICPA *Professional Standards*.

The Fraud Diamond

In the December 2004 New York State Society of CPAs *CPA Journal*, David T. Wolfe and Dana R. Hermanson discussed the "fraud diamond." The authors discussed the fraudster's thought process as follows:

Incentive. I want to, or have a need to, commit fraud.

Opportunity. There is a weakness in the system that the right person could exploit. Fraud is possible.

Rationalization. I have convinced myself that this fraudulent behavior is worth the risks.

Capability. I have the necessary traits and abilities to be the right person to pull it off. I have recognized this particular fraud opportunity and can turn it into reality.

Essentially, the authors are saying that an individual's personality traits and capability have a direct impact on the probability of fraud.

EXHIBIT C

Business Valuation and
Forensic & Litigation Services Section

AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

Calculating Lost Profits

Written by
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CHAPTER 1: INTRODUCTION

LIMITATIONS OF THIS PRACTICE AID

1. The purpose of this Practice Aid is to provide nonauthoritative guidance to practitioners engaged to prepare an analysis of lost profits. Often, these services are in a litigated environment. Although this publication discusses legal concepts and requirements, it is not intended to provide legal advice. Practitioners are advised to discuss legal concepts and requirements with counsel.

SCOPE OF THIS PRACTICE AID

2. This Practice Aid discusses roles the practitioner may be asked to take in a lost profits damage analysis, the professional standards applicable to those services, and the basic principles and guidelines for preparing lost profit damages analyses. As each engagement is unique, these principles and guidelines must be evaluated and adapted to the facts and circumstances that affect the engagement.

CHAPTER 2: OVERVIEW OF THE LOST PROFITS ANALYSIS

3. Lost profits are typically claimed as an element of economic damages in a litigation setting. Damage analyses are prepared to provide an estimate of the detriment suffered by the plaintiff as a result of a wrongful act of the defendant. In order to prove damages the plaintiff must show that

The wrongful act of the defendant caused a loss and

The amount of the loss can be estimated with reasonable certainty.

In addition, for contract claims, the plaintiff must show that the loss incurred was foreseeable at the time the contract was entered into by the parties.

4. Only lost “net” profits are allowed as damages. Lost “net” profit is computed, in general, by estimating the gross revenue that would have been earned but for the wrongful act reduced by avoided costs. *Avoided costs* are defined as those incremental costs that were not incurred because of the loss of the revenue. After the net lost profits are determined, any actual profits earned are deducted to compute the damages.

5. Lost profits can only be claimed over the loss period. This period normally begins no earlier than the date of the wrongful act however, the date the loss begins may be subsequent to that date. The end of the loss period can vary. In a contract breach, the loss will be computed through the earlier of the return of the business to customary levels or the end of the term of the contract (which, in some cases, may include renewal periods). In other situations, such as tort claims or franchise contracts, the term may extend to the return to customary levels or the end of a “foreseeable” period.

CHAPTER 3: OVERVIEW OF APPLICABLE PROFESSIONAL STANDARDS

6. Computing lost profits is a consulting engagement and the standards for consulting engagements are contained in Statement on Standards for Consulting Services (SSCS) No. 1, *Consulting Services, Definitions and Standards* (AICPA, *Professional Standards*, vol. 2, CS sec. 100), issued by the American Institute of Certified Public Accountants (AICPA). Additionally, the practitioner must also comply with the general standards of the accounting profession contained in the AICPA Code of Professional Conduct, as well as the relevant standards established by state boards of accountancy or other licensing agencies and other professional organizations to which the practitioner may belong.

7. The following sections provide an overview of the professional standards established by the AICPA. For a more detailed discussion of these requirements, the practitioner should refer to AICPA Consulting Services Special Report 03-1, *Litigation Services and Applicable Professional Standards*.

THE AICPA CODE OF PROFESSIONAL CONDUCT

8. The AICPA *Code of Professional Conduct and Bylaws* (the Code) apply to all services rendered by AICPA members. The following sections of the Code have particular applicability to the practice of litigation services

Rule 102, *Integrity and Objectivity* (AICPA, *Professional Standards*, vol. 2, ET sec. 102.01)

Rule 201, *General Standards* (AICPA, *Professional Standards*, vol. 2, ET sec. 201.01)

Rule 202, *Compliance with Standards* (AICPA, *Professional Standards*, vol. 2, ET sec. 202.01)

Rule 301, *Confidential Client Information* (AICPA, *Professional Standards*, vol. 2, ET sec. 301.01)

Rule 302, *Contingent Fees* (AICPA, *Professional Standards*, vol. 2, ET sec. 302.01)

Rule 501, *Acts Discreditable* (AICPA, *Professional Standards*, vol. 2, ET sec. 501.01)

In some instances, the following also apply

Rule 101, *Independence* (AICPA, *Professional Standards*, vol. 2, ET sec. 101.01)

Rule 203, *Accounting Principles* (AICPA, *Professional Standards*, vol. 2, ET sec. 203.01)

An understanding and appreciation of the importance of all rules contained in the Code will assist the practitioner in their efforts to provide opinions that are relevant and reliable, and will assist the trier of fact.

Rule 101, Independence

9. Independence, as set forth in the Code, is ordinarily not required when performing litigation services. However, the practitioner should be aware that the lack of independence may be used to question the practitioner's credibility and objectivity when providing expert testimony. Additionally, the practitioner should be aware that the Sarbanes-Oxley Act of 2002 (Sarbanes-Oxley) may preclude the practitioner from providing expert services to attest clients.

Rule 102, Integrity and Objectivity

10. Integrity is adherence to an ethical code and freedom from corrupting influences and motives. In litigation, it is the attorney's role to act as the advocate of the client. The role of the practitioner, however, is to apply their specialized knowledge, skills, training, and experience in order to present conclusions and judgments to the trier of fact on complex or unfamiliar concepts. To fulfill this role, the practitioner must be objective.

Rule 201, General Standards

11. The general standards apply to litigation services as well as all other services rendered by practitioners to their clients. The general standards cover professional competence, due professional care, and sufficient relevant data, as follows

- a. Professional Competence.* Practitioners should undertake only those engagements that they can reasonably expect to complete with professional competence. Professional competence includes factors such as being able to identify client needs, applying an analytical approach, and being knowledgeable about the technical areas involved in the engagement. To comply with this requirement, the practitioner may need to consider that the assistance of other individuals with the requisite experience and education may be required. The practitioner also should consider that, as a result of legal requirements noted later in this Practice Aid, the reliability and relevance of expected testimony is likely to be subjected to careful judicial scrutiny.
- b. Due Professional Care.* The practitioner should exercise due professional care in the performance of any professional service. In complying with this requirement, the practitioner should be diligent and analyze critically all of the work performed and ensure that the work conforms to any other applicable professional standards.

- c. *Planning and Supervision.* The practitioner should adequately plan and supervise the performance of the professional services performed. As the facts and circumstances of each litigation engagement are unique, planning is an essential part of the engagement. Due to the dynamic process of litigation, however, plans may often change and engagement plans are typically not in written form. As with any professional service, the supervision of work performed by others is necessary to ensure quality performance of the services. The extent of the supervision will vary depending on the nature of the engagement. The practitioner should remember that, ultimately, the work is his or her responsibility and, as the expert, is subject to scrutiny in the litigation process.
- d. *Sufficient Relevant Data.* The practitioner needs to be able to support conclusions and opinions with sufficient relevant data. The practitioner is responsible for gathering enough sufficient relevant data to provide a reasonable basis for the opinions offered. It is up to the individual practitioner to decide the type, nature, and quantity of data that will satisfy this requirement. In litigation, the data can be in the form of legal evidence, assumptions, or other documentation.

Rule 202, Compliance With Standards

12. The practitioner is required to comply with standards promulgated by the AICPA Council. For practitioners performing litigation services, that body is the Consulting Services Executive Committee, which issued SSCS No. 1, *Consulting Services: Definitions and Standards*.

Rule 203, Accounting Principles

13. To the extent that generally accepted accounting principles (GAAP) may apply to the litigation services engagement, the practitioner shall apply the appropriate accounting principles.

Rule 301, Confidential Client Information

14. The practitioner may not disclose confidential client information without the client's consent. Practitioners should be aware that, in a litigated environment, they may be confronted with the risk of breaching client confidentiality. Practitioners often gain knowledge and experience from other clients that are nonparties to the litigation, which may be considered in reaching conclusions or opinions. If the practitioner utilizes specific information obtained from other clients, the practitioner may be required to disclose the source of that information. The practitioner, in the absence of obtaining consent from the other client, may be precluded from utilizing this information.

THE CONSULTING STANDARDS

15. In addition to the general standards, the Consulting Standards, as noted above, apply to consulting engagements and require compliance under Rule 202, *Compliance With Standards*. These standards include serving the client's interest, establishing an understanding with the client, and communicating with the client.

Rule 102, Client Interest

16. This rule of the Code states:

In the performance of any professional service, a member shall maintain objectivity and integrity, shall be free of conflicts of interest, and shall not knowingly misrepresent facts or subordinate his or her judgment to others.

Practitioners should be cognizant, however, that they do not act as advocates for the client. The practitioner should be an advocate for his or her opinions and conclusions, and must maintain objectivity in his or her analysis.

Understanding With the Client

17. The practitioner should establish an understanding with the client, who may be the attorney for one of the litigants, about the responsibilities of the parties and the nature of the services to be performed. This understanding may be either written or oral. Practitioners should refer to the AICPA Business Valuation and Forensic and Litigation Services Section Practice Aid 04-1, *Engagement Letters for Litigation Services*, for a more detailed discussion.

Communication With the Client

18. The practitioner is required to inform the client of (a) any conflicts of interest that may occur under Rule 102 and the Interpretations issued pursuant to Rule 102, (b) any significant reservations the practitioner has concerning the scope or benefits of the engagement, and (c) significant engagement findings or events. In litigation engagements, these communications are usually oral. Many practitioners' engagement letters include language that states that the practitioner's communications with counsel will satisfy the requirement to communicate with the client.

OTHER GUIDANCE

19. In addition to the professional standards, and the Practice Aids and Special Reports identified in other sections, the following nonauthoritative AICPA Practice Aids may be useful to the practitioner in preparing lost profits analyses:

- **Practice Aid No. 06-1**, *Calculating Intellectual Property Infringement Damages*
- **Practice Aid No. 02-1**, *Business Valuation in Bankruptcy*
- **Practice Aid No. 98-2**, *Calculation of Damages from Personal Injury, Wrongful Death, and Employment Discrimination*
- **Practice Aid No. 98-1**, *Providing Bankruptcy and Reorganization Services*
- **Practice Aid No. 96-3**, *Communicating in Litigation Services: Reports, a Non-Authoritative Guide*
- **Practice Aid No. 93-4**, *Providing Litigation Services*

CHAPTER 4: OVERVIEW OF CASE LAW AND EVIDENTIARY STANDARDS

20. In addition to professional standards, the practitioner must also be aware of and comply with applicable case law and evidentiary standards regarding the admissibility of expert testimony. The law and standards will be dependent upon the venue of the litigation; state law and standards may be different from federal standards and law, and state law and standards will vary from jurisdiction to jurisdiction. The practitioner should discuss the case law and evidentiary standards applicable to the engagement with counsel to ensure compliance with these requirements.

STATE LAW

21. Although laws and evidentiary standards vary from state to state, they generally provide for common requirements for expert testimony to be admitted as evidence. Generally, experts will be required to establish the following:

- They have the requisite training, skill, knowledge, and/or experience in their field.
- They must show the facts, data, assumptions, and other documentation that were relied upon in reaching their conclusions and opinions.
- They must show the basis upon which they reached their conclusions and opinions, including the methodology used.

FEDERAL LAW

22. The U.S. Supreme Court has ruled that the federal judge is to serve as gatekeeper for the admissibility of expert scientific testimony and may look to several factors to ensure that the testimony is reliable and relevant to the matter at issue. See *Daubert v. Merrill Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). This ruling was extended to include testimony of nonscientific experts, including financial experts in *Kumho Tire Company, Ltd. v. Carmichael*, 526 U.S. 137 (1999).

23. The Federal Rules of Evidence provide the basis upon which a federal judge may (a) determine whether expert testimony meets the minimum standards, and (b) identify the bases of opinion testimony by experts. The rules relevant to practitioners providing litigation services include the following:

Rule 702, “Testimony by Experts” states:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Rule 703, “Bases of Opinion Testimony by Experts” states:

The facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing. If of a type reasonably relied upon by experts in the particular in forming opinions or inferences upon the subject, the facts or data need not be admissible in evidence in order for the opinion or inference to be admitted. The proponent of the opinion or inference shall not disclose facts or data that are otherwise inadmissible to the jury unless the court determines that their probative value in assisting the jury to evaluate the expert’s opinion outweighs their prejudicial effect.

See Appendix A, “Comparison of AICPA Professional Standards and Federal Rule of Evidence 702,” included herein. Appendix B, “Testimony Pyramid,” shows the requirements for admissible opinions.

CHAPTER 5: ROLE OF THE PRACTITIONER IN LOST PROFITS ANALYSIS

24. The practitioner may be engaged to provide services as a consultant, an expert witness, or in some other capacity, including acting as a trier of fact, special master, court-appointed expert, referee, arbitrator, or mediator. The practitioner should establish a specific understanding of the services to be performed at the inception of the engagement. This understanding, whether expressed in writing or orally, should be documented. The services the practitioner may be asked to perform may be varied in scope and breadth. Refer to Appendix C, “Typical Litigation Services.”

PRACTITIONER AS EXPERT

25. The practitioner engaged as an expert is expected to provide testimony before a trier of fact regarding their conclusions and opinions. This testimony may be presented at a deposition, in court, or in arbitration. Generally, in these settings, all work of the expert is discoverable. The practitioner is normally required to provide all records relating to the engagement, including correspondence, notes of meetings, reports, analyses, research, and documents or data that were reviewed or relied upon in reaching their conclusions or opinions. The practitioner may also be required to provide any drafts of reports, analyses, and other documents prepared. The practitioner should seek the advice of counsel regarding the discoverability of such information at the inception of the engagement and should remain cognizant of the requirements during the course of the engagement.

26. The practitioner may also be asked to participate in and/or provide reports or analyses for mediations and other forms of settlement negotiations. Most states have rules regarding the later discoverability of the discussions, reports, and/or analyses provided in these forums. Practitioners should seek advice of counsel on how to maintain the confidentiality of this information.

PRACTITIONER AS CONSULTANT

27. Alternatively, the practitioner may be engaged as a consultant. As a consultant, the practitioner is usually not expected to provide expert testimony. The functions that may be performed include identification of issues, assisting in developing strategies, fact-finding, analysis, locating other experts, and assisting and managing discovery.

28. The practitioner should keep in mind, however, that should the role be subsequently expanded to include expert testimony, all work performed, even work performed as a consultant, may be discoverable.

PRACTITIONER IN OTHER ROLES

29. When engaged to perform other services, the practitioner should establish a clear understanding of the expected services. In a number of instances, the services more closely resemble expert witness services, such as an engagement to serve as a court-appointed expert or special master. In other services, the role may be more like that of a consultant.

CHAPTER 6: QUALIFICATIONS AND SKILLS

30. Whether the practitioner is engaged as an expert or as a consultant, the practitioner needs to have the qualifications and skills necessary to comply with the requirement that only those engagements that can reasonably be expected to be completed are undertaken, as required by Rule 201 of the Code of Professional Conduct. Additionally, practitioners need to be cognizant of the fact that their qualifications may be challenged in litigation.

31. Practitioners often possess a variety of education, training, experience, and skills that are relevant to a lost-profits analysis. Although there is no formula for the proper mix of qualifications and skills, the practitioner should, however, consider a number of factors in deciding whether their qualifications are sufficient to perform lost-profits analyses.

TRAINING AND EXPERIENCE

32. As a CPA, the practitioner typically has an educational background in accounting and financial matters, and some experience in providing other kinds of accounting services to clients. The practitioner may need to consider whether he or she possesses or can acquire additional training and experience that may be applicable to the lost-profits analysis. The training and/or experience may include knowledge of the following:

- Specialized industries or fields of study
- Different clients and industries
- Accounting and tax rules and regulations
- Financial analysis and modeling
- Application of statistical methods and concepts such as regression and trend analysis

OTHER SKILLS

33. The practitioner may also need to consider whether he or she possesses or can acquire other skills that may be relevant to the lost-profits analysis. Those skills could include the ability to:

- Present complex information or concepts, either orally or in writing, in a clear and concise manner.
- Reconstruct financial data.
- Quantify the impact of events.

- Obtain, review, and appropriately apply industry or other statistical information.
- Understand and apply applicable legal and evidentiary standards.

USE OF OTHER EXPERTS

34. In a number of instances, the practitioner may need to consider whether the use of other individuals with applicable training and experience is necessary. The practitioner should, however, discuss the need for the use of other experts with counsel. Examples of other individuals who may be necessary to appropriately determine lost profits include those with specialized knowledge or experience in the following:

- Specific scientific fields such as engineering or other technological areas
- Specialized industries such as construction, oil and gas, or banking
- Market data such as market share or market demand

CHAPTER 7: LOST PROFITS CLAIMS

DAMAGES AND DAMAGE TYPES

In general, damages are “. . . the sum of money which a person wronged is entitled to receive from the wrongdoer as compensation for the wrong.”¹

35. Damages can be broken down into three main types: actual or compensatory, nominal, and punitive.

- *Actual or Compensatory Damages* are those damages awarded to a Plaintiff to compensate for a proven injury or loss. They are the compensation to repay actual losses incurred.
- *Nominal Damages* represent a sum awarded if a legal injury has been suffered but there is no substantial loss or injury to be compensated.
- *Punitive Damages* are those damages awarded in addition to actual damages if the defendant acted with recklessness, malice, or deceit. Punitive damages, which are intended to punish and thereby deter blameworthy conduct, are generally not recoverable in a breach of contract action.

36. The focus of this Practice Aid is on actual or compensatory damages related to a claim for lost profits. Lost profits cases usually involve either a breach of contract or a tort.

CONTRACT DISPUTES

37. Contract disputes arise if one party does not fulfill the obligations of the contract (a *breach*). Lost profits may be recoverable if damages can be demonstrated to be caused by the breach.

TORT

38. Tort cases arise as a result of a civil wrong including personal injury, property damage, unfair competition, unlawful misappropriation, negligence, or fraud. If damages can be proven with reasonable certainty and shown to have been caused by the wrongful act, damages for lost profits may be recoverable.

¹ Frank Gahan, “The Law of Damages,” 1 (1936), as noted in *Black’s Law Dictionary*.

CHAPTER 8: LEGAL PRINCIPLES OF PROVING DAMAGES

CAUSATION

39. Damages for lost profits are recoverable only if the breach or wrongful act by the defendant was the proximate cause of the loss. *Proximate cause* is an act from which an injury results as a natural, direct, uninterrupted consequence and without which the injury would not have occurred. In other words, there must be a link between the wrongful act and the resulting damages.

Transaction Causation

40. Transaction causation relies on the concept that “but for” the breach or wrongful act, no damages would have been incurred. Transaction causation alone is inadequate to demonstrate proximate cause, however. In addition to transaction causation, the plaintiff must demonstrate “loss causation.”

Loss Causation

41. The plaintiff must prove that their loss *is related* to the breach or wrongful act. The fact that the defendant breached a contract or performed a wrongful act does not alone support damages.

42. For example, in *Universal Commodities, Inc. v. Weed*, 449 S.W. 2d 106 (Tex. Civ. App. 1969), plaintiff leased a seafood processing plant from defendant, who was obligated to supply the seafood to be processed. Defendant breached the contract, but the court denied lost profits damages because plaintiff had been unable to secure financing for the business and would not have had sufficient capital to operate and make a profit even if defendant had performed as required by the contract.

43. The practitioner should also be aware of the distinction between the legal requirement of causation and the proof of the amount of damages. In order to recover damages for lost profits, it is necessary to show that the damages were proximately caused by the wrongful conduct of the defendant.

44. The fact of damage is required to be proven with reasonable certainty. The fact of damage relates to whether the plaintiff can prove that the acts of the defendant caused damage to the plaintiff. Once the fact of damage has been established, the amount of damage can be calculated.

45. Although the defendant’s acts need not be the sole cause of the plaintiff’s lost profits, they must be a significant or material factor in the cause of that loss.

Calculating Lost Profits

46. Although other factors may also be partially responsible for the plaintiff's lost profits, in some cases, it may not be practicable, or possible, to eliminate the effect of all other possible causes of loss. However, it is necessary to show that these other factors have been considered and, to the extent possible, have been taken into account.

47. Sufficient evidence must be presented to the trier of fact to allow a determination to be made as to what portion of the plaintiff's damages may be properly assigned to the defendant.

48. As discussed in a later section, the practitioner may want to present calculations in a manner that shows how the various factors causing the plaintiff's losses contributed to that loss.

FORESEEABILITY (CONTRACT DAMAGES ONLY)

49. Damages for lost profits are recoverable only if they are reasonably foreseeable by the breaching party at the time of contracting. The reasonably foreseeable rule dates back to the famous English decision *Hadley v. Baxendale* (156 Eng. Rep. 145, 151 (Ex. 1854)) and is still law today.

50. In *Hadley v. Baxendale*, the Court set out that damages are recoverable only if they were reasonably foreseeable by both parties at the time of the contract and that they arose naturally from the breach.

51. For example, in *Hampton v. Federal Express Corp.*, 917 F. 2d 1119, 1125-26 (8th Cir. 1990), the Court found that damages resulting from the failure to deliver blood samples of cancer patients in need of bone marrow transplants were not recoverable if the Defendant had no knowledge of the package's contents and therefore could not reasonably foresee any injury to patients.

CERTAINTY

52. Damages for lost profits are recoverable only if the plaintiff can prove that the damages related to lost profits are reasonable and that they have been calculated using reliable factors without undue speculation. The practitioner should discuss with counsel the applicable federal or state laws regarding the required degree of certainty.

53. The calculation of lost profits does not require precision, and an estimate of damages can be made. However, the loss cannot be based on speculation. Lost profits that are speculative, such as those calculated using unreasonable growth rates, are not recoverable.

54. For example, in *DSC Communications v. Next Level Communications*, 107 F.3d 322, 329 (5th Cir. 1997), the Court upheld recovery of lost profits because plaintiff's damage expert presented a damage model that included an assumption of future market share based on data ob-

tained from respected sources in the telecommunications market and upon a showing that the plaintiff's history of strong performance in the field was indicative of likely success.

55. However, in *Holt Atherton Ind., Inc. v. Heine*, 835 S.W.2d 80 (Tex. 1992), defendants sold a bulldozer to plaintiffs that defendants subsequently refused to repair because they did not recognize the warranty. The court held lost profits were *not* recoverable because the plaintiffs failed to show they had enough work to fully utilize the bulldozer.

CHAPTER 9: LOSS PERIOD

56. The length of the loss period can vary depending on the underlying cause of action and upon the underlying facts of the case.

BREACH OF CONTRACT

57. In a breach of contract action, the loss period will generally be projected over the remaining term of the contract. Although this may sound straightforward, the issue can become complicated if the length of the contract is one of the issues in dispute. In the case of long-term contracts, a number of courts have been reluctant to award damages for the full length of the loss period (i.e., the full term of the contract) because of uncertainty. Additionally, although a franchise is a contract, the contract is usually for an unspecified period of time, and the courts may therefore be reluctant to award damages for extended periods of time. The longer the term of the damage projection, typically, the greater the level of uncertainty, which decreases the likelihood that the certainty and foreseeability tests can be met.

58. Although damages typically do not extend beyond the term of the contract, an issue could conceivably arise if an extension of the contract term was being negotiated when the breach occurred. Arguably, had the breach not occurred, the contract would have been extended for an additional term. Conversely, if the parties have had a history of renewals and such an extension was provided for in the contract, a loss period which considers contract renewals may be warranted.

TORTS

59. In the case of tort actions, the loss period is usually from the date of the wrongful act until the date operations return to “normal.” The date that operations return to “normal” is the period during which the business either restores itself to an equivalent position prior to the dispute or to a position that takes into consideration the changes that would have otherwise occurred during the damage period absent the tort. In a number of situations, as a result of the wrongful act, the plaintiff’s operations are permanently affected and may never return to “normal.”

CHAPTER 10: CALCULATING LOST REVENUES

60. The first element in the determination of lost profits is the calculation of lost revenues.

61. This section discusses the calculation of lost revenues in terms of the normal methods used in lost profit calculations. The normal methods of calculating lost revenues include:

- The “Before and After” method
- The “ardstick” (or “Benchmark”) method
- An approach based on the terms of the underlying contract
- An accounting of the defendant’s profits
- Others

62. In certain specialized damages areas, different methods may be used that are based on applicable statutes or case law. Although this Practice Aid is not intended to address these other areas, a brief overview of some of the issues involved in those areas is contained in Chapter 17, “Alternative Damage Measures Other Than Lost Profits.”

63. Additionally, other factors may need to be considered when the subject of the lost profits calculation is a newly established business or a business lacking an historical track record of revenue generation. A brief discussion of the issues specific to such businesses is also included in Chapter 17.

THE “BEFORE AND AFTER” METHOD

64. This method compares the plaintiff’s performance before the event or action causing lost profits to the plaintiff’s performance after that event or action. The underlying theory is that, “but for” the defendant’s action, the plaintiff would have experienced the same level of revenues and profits after the event or action as the plaintiff did before that event or action.

65. The plaintiff’s prior experience, which can be determined from the plaintiff’s historical accounting records, is generally subject to dispute less than other components of the calculation. In addition, the plaintiff’s experience subsequent to the defendant’s acts can be determined, at least up through a date near to the date at which the calculation is made, from the plaintiff’s historical accounting records.

66. The practitioner, however, should consider other factors that could have affected the plaintiff’s level of revenues and demonstrate how those factors have been taken into consideration.

THE “YARDSTICK” (OR “BENCHMARK”) METHOD

67. This method utilizes a “yardstick” that is used to estimate what the revenues and profits of the affected business would have been. Examples of possible yardsticks that might be employed in the calculation include the following:

- The performance of the plaintiff at a different location
- The plaintiff’s actual experience versus past budgeted results
- The actual experience of a similar business unaffected by the defendant’s actions
- Comparable experience and projections by nonparties
- Industry averages
- Pre-litigation projections

68. When using this method, the practitioner will need to demonstrate that the plaintiff’s operations are sufficiently comparable to the “yardstick” used. This could require that the yardstick company be in the same geographic area and/or operates under similar conditions.

69. In addition, as with the “before and after” method, the practitioner may need to consider other factors that could have caused the plaintiff’s performance to differ from the yardstick selected and show how those factors have been taken into consideration.

CALCULATION BASED ON THE TERMS OF THE CONTRACT

70. In some instances, the lost profits calculation is made in relation to a specific contract. In that instance, many of the elements of the calculation may be set forth in the contract document, i.e., the number of units to be sold, unit prices, etc. In this situation, a model might be developed that calculates the revenues anticipated under the terms of the contract.

AN ACCOUNTING OF DEFENDANT’S PROFITS

71. In certain situations, such as cases involving unfair competition or the misappropriation of trade secrets, an accounting of the profits realized by the defendant may be used as the measure of the plaintiff’s lost profits. In obtaining an accounting of the defendant’s profits, the plaintiff is only entitled to receive value of the unjust enrichment of the defendant through disgorgement, i.e., the defendant is required to surrender profits attributable to the misappropriation or bad act to the plaintiff. To the extent that profits are attributable to other factors, the defendant would not have to disgorge those amounts. In some jurisdictions (and for some causes of action), the plaintiff only has the burden to identify the revenues associated with the misappropriation,

whereas the defendant has the burden to prove both the costs incurred in generating the revenues as well as apportioning the profits between the misappropriation and other profit generators.

OTHER

72. Other approaches may also be appropriate depending on the particular facts and circumstances involved in the matter for which lost profits are being calculated. Although other models may be developed using information specific to the particular case, the general principles underlying the methods discussed above should be considered in the development of those models.

PAST AND FUTURE LOST REVENUES

73. In many cases, the plaintiff's lost revenues may include both past and future lost revenues. If there are future losses, i.e., the loss period extends beyond the date of trial, the practitioner will need to estimate both those future revenues that will be realized by the plaintiff and those revenues that the plaintiff would have realized but for the wrongful act of the defendant. Only the incremental difference between the "but for" revenue and the projected actual revenue should be included as lost revenues.

74. Although the attestation standards for financial forecasts and projections do not apply to litigation services, practitioners may want to refer to the guidance codified in AT Section 301, *Financial Forecasts and Projections* (AICPA, *Professional Standards*, vol. 1, AT sec. 301).

DO THE CALCULATED LOST REVENUES MAKE SENSE?

75. Whatever method is used to calculate the amount of lost revenues, once the practitioner has performed the initial calculations, it is important to consider the reasonableness of the computed lost revenues.

76. For instance, the practitioner should consider factors such as:

- Capacity considerations
- Market share
- Industry knowledge and working with industry experts

CHAPTER 11: COST ESTIMATION

77. After establishing the amount of lost revenues, the practitioner will need to calculate the costs associated with the generation of those revenues.

CONCEPT OF AVOIDED COSTS

78. The costs that should be deducted from lost revenues in order to calculate lost profits are generally referred to as avoided costs. *Avoided costs* are those costs that would have been incurred in connection with the generation of the lost revenues but were not incurred.

79. To the extent that the plaintiff has incurred costs that would not have been incurred in the absence of the defendant's misconduct, those costs should be offset against the avoided costs.

ANALYSIS OF THE PLAINTIFF'S COST STRUCTURE

80. In order to determine the amount of avoided costs, the practitioner needs to understand the plaintiff's cost structure.

81. Depending on the nature and/or size of the plaintiff, the degree of detail contained in the plaintiff's accounting records regarding the costs associated with particular products or services may vary considerably.

82. Also, depending on the nature of the dispute, different degrees of specificity may be required in estimating the extent of avoided costs.

83. The practitioner should analyze the plaintiff's cost structure in order to determine the relationship between individual cost elements/categories and sales.

84. The performance of this analysis also will normally require the practitioner to understand the cost environment in which the plaintiff operates in order to identify the cost drivers or factors that affect particular costs.

FIXED VERSUS VARIABLE COSTS

85. The starting point for the cost structure analysis may be the determination of fixed versus variable costs. Unless the loss period at issue is very short, however, it is unlikely that all costs will be purely fixed or variable.

Calculating Lost Profits

86. Some costs, such as cost of goods sold, may vary directly with sales. These costs, however, may not be entirely avoided. For instance, costs may have been incurred to produce product prior to the wrongful act in anticipation of sales that did not occur as a result of the wrongful act. In addition, some manufacturing costs may be fixed in nature rather than variable.

87. Other costs, such as rent, are normally considered to be fixed. The practitioner should, however, consider whether the fixed or variable nature of such costs might change dependent on factors such as the length of the loss period or the level of production and/or sales. The results of this analysis may be the identification of certain costs that are semivariable or fixed only within a limited period of time.

88. The nature of costs relevant to the analysis of avoided costs, and the terms used to refer to them, may include all, or some, of the following:

- *Cost of goods sold.* The costs generally captured under this heading would often be expected to vary directly with revenues, but there may be some distortion of that relationship depending on the inventory costing method used by the plaintiff.
- *Direct costs.* The costs specific to a particular product or activity, these costs are usually, but not always, variable.
- *Overhead costs.* The costs not specific to a particular product or activity; overhead costs may, however, be apportioned to specific products or activities as allocated or absorbed overhead. Some of these costs, such as marketing and advertising costs, may be avoided as a result of the lost revenue.
- *Indirect costs.* The costs that are not specific to a particular product or activity.
- *Short-term and long-term costs.* The costs that may be fixed or variable depending on the duration of the loss period.

89. As indicated above, the duration of the loss period can affect the extent to which costs are avoided. If the loss period is relatively short, it may not be possible to avoid certain costs. If the loss period is longer in duration, some costs that in the short-term would be fixed may be variable or semivariable.

NONSTATISTICAL METHODS OF COST ESTIMATION

90. Various nonstatistical methods can be employed by the practitioner to estimate costs. Which methods or combination of methods is appropriate will depend on the particular situation with which the practitioner is dealing. These methods include the following:

- *Account analysis.* This method involves the review of the detailed general ledger or chart of accounts. The practitioner uses judgment to assess whether costs are fixed or variable. The

subjective nature of this process can have drawbacks as some costs are semivariable, in that they are neither entirely fixed nor entirely variable.

- *Direct assignment.* This method involves the identification by the practitioner of the direct costs of an activity. These costs would include direct labor and materials.
- *Accounting estimates.* This method estimates the cost of a product using the plaintiff's experience with similar or related products. Standard costs might also be available for some elements of the product cost.
- *Cost accounting allocations.* This method apportions costs that are not specific to a particular product or activity based on some objective measure, including revenue, labor hours, or units sold.
- *Ratio analysis.* This method is used to allocate the cost of a particular product or activity in proportion to some other measure such as labor hours or units of production.
- *Graphical approaches.* This method involves the plotting of the cost of a particular product or activity over time or against some other measure.
- *Industrial engineering.* This method may be used if an industrial engineering study may be available that addresses the costs associated with the various processes involved in the production of the product at issue.

91. The practitioner is typically attempting to quantify the amount of incremental costs associated with the lost revenues. Caution is required when using these methods, as many of them tend to understate incremental costs. Although not always possible, the practitioner may wish to consider using historical data as a means of validating the reasonableness of results achieved.

STATISTICAL METHODS OF COST ESTIMATION

92. In addition to the nonstatistical methods discussed above, various statistical methods of estimating costs may be employed by the practitioner. These statistical methods include:

- *Regression analysis.* This is a technique for identifying relationships between a cost and one or more variables, such as sales or production levels.
- *Survey data.* In some situations, the practitioner may use a survey to measure a factor.
- *Attribute sampling.* This is used to estimate a characteristic of a population.

93. Although the scope of this Practice Aid is insufficient to include a full discussion of these statistical methods, the practitioner should be aware that specific rules and considerations apply

Calculating Lost Profits

to the use of these techniques. Familiarity with those rules is essential if the practitioner is to rely on the results of these techniques.

DO THE CALCULATED AVOIDED COSTS MAKE SENSE?

94. As with the calculation of the lost revenues, the practitioner will need to consider the results of the calculation of avoided costs to evaluate whether the results appear reasonable.

CHAPTER 12: PREJUDGMENT INTEREST ON PAST LOSSES

95. Generally, prejudgment interest is used to compensate the plaintiff for the interest not earned on lost profits from the date of the incident to the date of trial. Awarding prejudgment interest converts time-of-incident damages into time-of-judgment damages, allowing the plaintiff to be fully compensated for the loss of use of those funds.

96. Courts have considerable discretion in the calculation of prejudgment interest, including the interest rates to be applied and the manner of computing interest. If the law does not prescribe the rate or form of interest for past losses, practitioners will normally apply a reasonable interest rate to bring those losses forward. Rates that might be used for the calculation of prejudgment interest include but are not limited to the prime rate, the defendant's after-tax borrowing rate, the plaintiff's cost of capital, a Treasury bill or bond rate, a state statutory rate, or a stated rate pursuant to a contract between the parties.

97. Many states calculate prejudgment interest utilizing a statutory rate that is set annually. State law may exclude prejudgment interest, limit prejudgment interest to a statutory rate, or exclude compounding. The practitioner should check the appropriate state's annotated statutes, which contain legislative history and current case law. For federal cases, the prejudgment interest rate will depend on the statute under which the plaintiff brings suit. Generally, federal courts have the discretion to grant prejudgment interest and to choose a reasonable interest rate and method of computation.

98. In some jurisdictions, all past and future damages are discounted to their present value as of the date of the wrongful act, and then that amount may or may not be subject to prejudgment interest to the trial date. In other jurisdictions, damages projected to be incurred subsequent to the trial date are discounted to the trial date, and damages related to prior periods may or may not be subject to prejudgment interest.

99. Some states allow prejudgment interest to be compounded while other states only allow simple interest to be computed. As mentioned above, federal courts have the discretion to choose between simple interest and compound interest.

100. An Ex Ante (date of breach) or Ex Post (trial date) approach may be used to apply prejudgment interest. It is suggested that the decision be made as to which method is to be used after counsel has advised the practitioner regarding applicable statutory and case law. Damages may be computed under both approaches and presented as alternatives to be decided upon by the trier-of-fact. (See paragraphs 106 to 109 for a discussion of these approaches.)

101. Claims may be liquidated or unliquidated. A claim is liquidated if its specific dollar amount is known. A claim is unliquidated if the exact amount owed has not been determined. Unliquidated damages are identified only after a judgment is rendered by the court setting the amount of damages and, most often, occur in tort actions. In many states, prejudgment interest on otherwise unliquidated damages do not begin at the time of the incident, but can begin from the date of a settlement offer or a particular court filing.

102. Prejudgment interest accrues between the time of the incident and the time of trial or judgment, whereas post-judgment interest accrues only after judgment is entered.

CHAPTER 13: FINANCIAL DISCOUNTING OF FUTURE LOST PROFITS TO PRESENT VALUE

103. When calculating lost profits, there is often both an historical component and a future component. The historical component would include lost profits that have been incurred from the date of breach to the date of trial and the future component would include lost profits that will be incurred from the date of trial to some date in the future.

THE TIME VALUE OF MONEY

104. It is necessary to state the future component of lost profits in terms of their present value. The formula for present value is:

$$\frac{LFP_1}{(1 + DR)^1} + \frac{LFP_2}{(1 + DR)^2} + \frac{LFP_3}{(1 + DR)^3} + \frac{LFP_4}{(1 + DR)^4} + \dots + \frac{LFP_n}{(1 + DR)^n}$$

LFP = Lost Future Profits calculated in each period

DR = Discount Rate

n = year or period

105. Because the damage award is intended to make the plaintiff whole, failing to discount future lost profits would result in an award that would produce a windfall to the plaintiff, as the award can be invested with a return earned on that investment. The challenge for the practitioner is to determine an appropriate discount rate that takes into consideration the following factors:

- *The time value of money.* Most individuals would prefer to have a dollar to spend today rather than having to wait until some point in the future. For those individuals, if money payable in the future is suddenly available today, there may be a willingness to accept a discount in order to eliminate the waiting period. Assuming an annual interest rate of 3 percent, 10,000 today would be worth 11,592.74 in five years. Conversely, five years from now, 10,000 would only be worth 8,626.09 today. As such, an investor would rather receive funds today instead of having to wait until some time in the future.
- *Risk.* For most investments, there is a tradeoff between risk and reward. The greater the level of risk inherent in a projected stream of cash flows, the greater the discount rate required to compensate an investor for accepting that risk. Conversely, the risk averse investor would generally be willing to accept a lesser return in exchange for a reduced level of risk.

EX POST METHODOLOGY VERSUS EX ANTE METHODOLOGY

106. In discounting future lost profits to their present value, the expert must select between the ex ante methodology and the ex post methodology, or apply a hybrid of the two approaches. Appendix D, “Ex Ante Versus Ex Post,” contains a chart that illustrates the ex ante and the ex post methodologies.

107. The ex ante methodology assumes that all lost profits are future lost profits and must be discounted back to the date of the breach. There is no historical component. In an ex ante calculation, the practitioner relies only on information that was known or knowable as of the date of the breach. Once the present value of all future lost profits is determined, the resulting damage amount is brought forward to the date of the award by applying prejudgment interest (if permitted).

108. The ex post methodology, conversely, relies on all information that is known or knowable up to the date of trial in order to calculate lost profits. There is no discounting of the historical lost profits that were incurred between the date of the breach and the date of trial. If permitted, prejudgment interest would be applied to the historical lost profits based on the timing of the cash flows determined by the practitioner. Future lost profits consist of those profits that extend beyond the date of trial, and would be discounted back to the date of trial.

109. Some practitioners have chosen to apply a hybrid methodology, in which all lost profits are discounted back to the date of the breach, but the practitioner would rely on all information that was available up to the date of trial. To the extent that the discount rate is greater than the prejudgment interest rate, the ex ante methodology would result in a lower damage amount than the ex post methodology. In those instances in which the discount rate is equal to or less than the prejudgment interest rate, the ex ante methodology would typically produce an equivalent or higher damage amount, respectively.

METHODS OF DETERMINING DISCOUNT RATE

110. In business valuation engagements, discount rates are typically based on either the subject company’s weighted average cost of capital (WACC) or its cost of equity. It is not uncommon for a company’s cost of equity to exceed 20 percent, especially among smaller, less mature companies. Although some practitioners have argued the appropriateness of applying equity rates of return to lost profit calculations, the courts have generally been reluctant to accept discount rates based on a company’s cost of equity.

111. The courts have provided minimal guidance as to what constitutes an appropriate discount rate. Among those few jurisdictions that have published written opinions, some courts have ruled that the discount rate used to calculate lost profits should incorporate both an inflationary com-

ponent and a risk component while others have required the use of a risk-free rate. Additionally, there are conflicting opinions on this point within a jurisdiction. Further complicating this issue, for those courts accepting an adjustment to the discount rate for risk, there is considerable disagreement as to how the risk component should be addressed. The diversity of the rulings are reflected in the following opinions:

- *American List Corp v. U.S. News World Report, Inc.*, 75 N. .2d 38, 550 N. .2d 590 (1989). In a contract dispute, defendant's proposed discount rate of 18 percent was accepted by the trial court, reflecting risk of nonperformance. The plaintiff argued that a 10-percent discount rate was appropriate. On appeal, the 18-percent rate was rejected and remanded, with the court finding that it "does violence to the settled principles of the doctrine of anticipatory breach because it would require the nonrepudiating party to prove ability to perform in the future."
- *Burger King Corp. v. Barnes*, 1 F. Supp.2d 1367 (S.D. Fla 1998). In a breach of franchise agreement case, plaintiff was entitled to lost royalty fees to be earned over a 210-month period. The projected lost royalties were discounted to present value using a discount rate of 9 percent. No basis for the 9-percent rate was provided in the opinion.
- *Diesel Machinery, Inc. v. B.R. Lee Industries, Inc.*, 418 F.3d 820 (Fed. 8th Cir., 2005). In a dealership dispute, defendant's expert argued for a 17.5-percent discount rate, which accounted for risks inherent in plaintiff's projected cash flow. The district court struck the portion of the expert's testimony addressing the discount rate, indicating that South Dakota law required the use of a risk-free rate. Although the U.S. Court of Appeals acknowledged that the proposed discount rate employed a sound methodology, it nonetheless ruled that the district court did not abuse its discretion.
- *Energy Capital v. United States*, 302 F.3d 1314 (Fed. Cir. 2002). A risk-free rate of 5.9 percent was initially rejected and remanded as not reflecting the inherent risks in the cash flows. The court accepted plaintiff's rate of 10.5 percent, based on an 8.5-percent benchmark yield for mortgage real estate investment trusts, plus an additional 2-percent adjustment for debt and profit. Defendant's suggested discount rate of 25 percent was not accepted by the court.
- *Fairmont Supply Company v. Hooks Industrial, Inc.*, No. 01-03-01129-CV (Tex. App. 1 Dist Houston 2005). In a breach of contract case, the trial court awarded plaintiffs lost profit damages. The defendant's expert testified that a discount rate of 33 percent was appropriate and plaintiff's expert testified that a discount rate of 36 percent was appropriate. The court accepted this range in calculating damages.
- *Knox v. Taylor*, 992 S.W.2d 40, 50 (Tex. App. Houston 14th Dist. 1999). In a libel claim, lost profits were awarded in connection with the termination of the agent's contracts. The court accepted a risk-free discount rate of 7 percent.

- *Kool, Mann, Coffee Co. v. Coffey*, 300 F.3d 340 (3d Cir. 2002). In a dispute over the sale of a marina and houseboat rental business, plaintiff claimed that the defendant failed to pay an agreed-upon purchase price, whereas the defendant argued misrepresentations on the part of the plaintiff. The court determined that the remaining balance of the purchase price would be calculated, in part, by growing adjusted cash flows by 7.5% per year for 15 years and discounting these cash flows to their present value using a discount rate of 18.5 percent. The 18.5-percent rate was offered by the plaintiff and was not disputed by the defendant.
- *Olson v. Nieman's*, 579 N.W.2d 299 (Iowa 1998). In a misappropriation of trade secrets case involving lost royalty income, the court accepted a discount rate of 19.4 percent, equal to an equity rate of return of 14.4 percent and a product specific risk premium of 5 percent.
- *Schonfeld v. Hilliard*, 62 F. Supp 2d 1062, 1074 n. 6 (S.D.N. . 1999). In a dispute over the funding of a closely held cable television station, included in lost asset value was an agreement to pay programming rights equal to \$100,000 per year for 10 years. The court accepted a discount rate of 8 percent, approximately equal to the 10-year Treasury bond rate.

112. As can be seen above, many of these cases reflect an acceptance of a proposed discount rate by the court resulting from the lack of any challenge on the record. Given the disparate treatment reflected in these cases, the practitioner is advised to develop a supportable discount rate, based on sound methodology, and apply the specific facts and circumstances of the engagement to the analysis. It is further suggested that the practitioner consult with counsel to understand the relevant case law in his or her jurisdiction.

113. In that regard, the practitioner may wish to consider the approaches typically used to develop a discount rate. These include the cost of equity, the cost of debt, and the WACC approaches.

Cost of Equity

114. The company's cost of equity is typically calculated using either a build-up approach or the capital asset pricing model (CAPM) approach.

Build-Up Approach

115. The *build-up approach* calculates a company's cost of equity, considering various components that are added to the risk-free rate. This approach is expressed using the following formula:

$$K_E = r_f + ERP + SP + IRP + CSP$$

- Risk-free rate (r_f)²
- Systematic risk³
 - o Equity risk premium (ERP)
 - o Size premium (SP)
 - o Industry risk premium/discount (IRP)
- Unsystematic company specific risk premium/discount (CSP)

116. In addition to the size premium and industry risk premium, the practitioner may wish to consider other adjustments, such as international risk premia/discounts, where appropriate.

117. Although the first four factors can often be quantified using market data, the unsystematic company specific risk premium/discount is based on specific factors affecting the subject company. In evaluating the appropriateness of this premium/discount, the practitioner may wish to consider such factors as (a) the company's financial condition; (b) its quality and depth of management; (c) the company's products, customers and suppliers; (d) the competitive environment in which the company operates; and (e) other factors impacting the company's projected cash flows. Given the lack of empirical market data available to quantify a company specific adjustment, the practitioner should develop support and be prepared to justify any such premium/discount.

Capital Asset Pricing Model (CAPM) Approach

118. Like the build-up approach, the CAPM approach estimates a company's cost of equity by adding systematic and unsystematic elements of risk to the risk-free rate. This approach is reflected in the following formula:

$$K_E = r_f + \beta(\text{ERP}) + \text{SP} + \text{CSP}$$

- Risk-free rate (r_f)
- Systematic risk:
 - o Beta (β)
 - o Equity risk premium (ERP)
 - o Size premium (SP)
- Unsystematic company specific risk premium/discount (CSP)

² U.S. Treasury rates are generally the most common measure of the risk-free rate, as these securities are considered free from default risk. Many experts use the Treasury bond rate equivalent to the future recovery period as the yardstick measure for purposes of discounting (i.e., 5-year Treasury Bond for a 5-year projection versus 10-year Treasury Bond for a 10-year projection).

³ Ibbotson Associates provides many systematic risk data sources in its *Stocks, Bonds, Bills, and Inflation S&P 500 Yearbook*, produced annually, and its *Cost of Capital* quarterly.

119. Unlike the build-up approach, CAPM captures much of the systematic risk inherent in the company through the use of beta (β). Beta is a measure of the volatility of a security relative to that of the broader equity markets.

Other Methods to Calculate the Cost of Equity

120. Although they are outside the scope of this practice aid, other methodologies have been developed to estimate a company's cost of equity. These methods include the arbitrage pricing theory and the Fama-French three factor model.

Cost of Debt

121. Some practitioners have used a variation of the subject company's borrowing rate as the basis for determining an appropriate discount rate to apply to projected lost profits. These include but are not limited to:

- Average cost of the subject company's total interest-bearing debt
- Marginal cost of the subject company's long-term debt
- Market bank yields for comparable companies

Weighted Average Cost of Capital

122. WACC is the cost of incremental capital to a firm considering its blended cost of debt, equity and other capital. WACC is calculated using the following formula:

$$\text{WAAC} = \left(K_D \times (1-t) \times \frac{D}{\text{TIC}} \right) + \left(K_E + \frac{E}{\text{TIC}} \right)$$

K_D = Cost of Interest Bearing Debt

K_E = Cost of Equity

t = tax rate

D = Interest Bearing Debt

E = Common Equity

TIC = Total Invested Capital (Total Debt + Total Equity)

123. As reflected above, the WACC is calculated by multiplying a company's after-tax cost of debt by its debt as a percentage of total invested capital and adding the resulting number to its cost of equity multiplied by its equity as a percentage of its total invested capital.

124. In order to determine the WACC, it is necessary to determine the capital structure of the entity (i.e., the level of debt, equity and other securities). The capital structure may include the following:

- Actual capital structure of the entity
- Industry capital structure
- Hypothetical capital structure to support cash flows

125. If the WACC is calculated using a fixed amount of debt, the practitioner may need to estimate the appropriate weightings. An increase in the weighting of the company's equity will increase the WACC and reduce the value of the company's equity. Conversely, a reduction in the weighting of a company's equity will reduce the WACC and increase the value of the company's equity. The weightings will need to be adjusted using an iterative process until assumed debt and equity weightings are equal to the calculated debt and equity weightings.

MID-YEAR VERSUS END-OF-YEAR DISCOUNTING

126. When discounting lost future profits (LFP), the practitioner may wish to consider modifying the calculation to apply a mid-year convention. The mid-year convention for LFP is reflected in the following formula:

$$\frac{LFP_1}{(1 + DR)^{0.5}} + \frac{LFP_2}{(1 + DR)^{1.5}} + \frac{LFP_3}{(1 + DR)^{2.5}} + \frac{LFP_4}{(1 + DR)^{3.5}} + \dots + \frac{LFP_n}{(1 + DR)^{n-0.5}}$$

127. The discounted future profits formula reflected in paragraph 104 presumes that all profits are earned and/or distributed on the last day of the year. For many businesses, this may not be a reasonable assumption. The application of mid-year assumption instead presumes that lost profits will be earned and/or distributed evenly throughout the year. The above formula can be further modified to more specifically reflect the seasonality or timing of profits in the subject company.

ADJUSTING FOR RISK IN PROJECTED PROFITS VERSUS ACCOUNTING FOR RISK IN THE DISCOUNT RATE

128. Many practitioners have addressed the concept of risk through the application of discount rates that reflect the level of risk inherent in the projected profits. Other practitioners, alternatively, have suggested that the profit projections themselves be modified downward to adjust for risk, allowing the expert to incorporate a risk-reduced, relatively low discount rate.⁴

129. The use of the latter approach does not eliminate the need to substantiate the reasonableness of the selected discount rate and the projected, risk-adjusted, profits. Its proponents, however, do believe that this approach is easier for judges and juries to understand. Although either

⁴ Dunn, Robert and Everett P. Harry, "Modeling and Discounting Future Damages," *Journal of Accountancy*, January 2002, pages 49-55.

Calculating Lost Profits

methodology must ultimately be left to the discretion of the expert, such alternative approaches do highlight the challenges that present themselves to the practitioner who is often forced to balance accepted financial theory against legal reality when preparing a defensible lost profits calculation.

CHAPTER 14: TAXES AND DAMAGES

130. In general, lost profits damages are taxable as ordinary income to the party to which damages are paid. Also, generally, whether received as a result of legal judgment or settlement, tax treatment is the same for lost profits damages. As such, lost profit calculations are typically prepared on a pretax basis. To the extent that the plaintiff received tax benefits as a result of losses caused by the purported bad act, such benefits are generally not considered.

131. Typically, the appropriate discount rate is the after-tax rate as any lost profits in the past could have been invested at the assumed pretax rate, and income taxes would have been paid on the interest earned. Thus, by applying an after-tax rate, the plaintiff's accumulated value net of taxes is reflected. The reason an after-tax rate rather than a pretax rate is used goes back to the goal of making the plaintiff whole. This can be demonstrated in the following example.

132. Assume that defendant in a suit for lost profits is liable to plaintiff for the loss of 1,000 in pretax cash flow. Further assume that plaintiff's after-tax discount rate is 12 percent and tax rate is 35 percent. The first method uses three steps to calculate plaintiff's damage award:

- Adjust the pretax cash flow to an after-tax cash flow.
- Discount the after-tax cash flow at plaintiff's after-tax discount rate.
- Gross-up the after-tax amount for the amount of taxes plaintiff will pay on the award to get the taxable damage award.

Assuming stable tax rates over the projection period, the second method arrives at the same taxable damage award by discounting the pretax cash flow amount using plaintiff's after-tax discount rate. This is illustrated in the following table.

Pretax Cash Flow	\$ 1,000			
x (1-Tax Rate)	(1-35%)	=	\$ 650.00	
/ (1+After-Tax Discount Rate)	(1+12%)	=	\$ 580.36	
/ (1-Tax Rate)	(1-35%)	=	\$ 892.86	Taxable Damage Award
Pretax Cash Flow	\$ 1,000			
/ (1+After-Tax Discount Rate)	(1+12%)	=	\$ 892.86	Taxable Damage Award

133. The practitioner may be asked to assist counsel in evaluating the tax impact of potential damage awards to the plaintiff and/or the defendant under alternative damage theories or settlement scenarios.

CHAPTER 15: MITIGATION OF DAMAGES

134. The plaintiff has an obligation to mitigate its damages. The duty of mitigation requires that the plaintiff take appropriate actions to overcome the damage purportedly caused by the defendant. This principle of mitigation of damages is summarized in the *Restatement Second of Contracts*, Section 350 comment (1981) quoted below:

Avoidability as a Limitation on Damages. (1) Except as stated in Subsection (2), damages are not recoverable for loss that the injured party could have avoided without undue risk, burden or humiliation. (2) The injured party is not precluded from recovery by the rule stated in Subsection (1) to the extent that he has made reasonable but unsuccessful efforts to avoid loss.⁵

135. Plaintiff's failure to mitigate damages is an affirmative defense that can be utilized by the defendant. The defendant, as the party breaching the contract, has the burden to prove that plaintiff's losses could have been avoided through mitigation of damages.

136. The plaintiff is generally not permitted to recover damages that were foreseeable and could have been avoided by the reasonable efforts of the plaintiff without causing undue expense or risk. In other words, the amount of earnings lost as a result of the plaintiff's failure to mitigate its own damages would likely not be recoverable. The plaintiff also cannot recover lost profits that an income-producing asset would have produced beyond the reasonable period of time it should have taken the plaintiff to replace the asset.

137. Reasonable expenses incurred in an effort to mitigate damages, even if plaintiff's efforts are unsuccessful, are typically recoverable as damages. The period of recovery for lost profits must be reasonable and may be influenced by the plaintiff's actions to mitigate.

138. It is important that the practitioner understand what steps, if any, were taken by the plaintiff to mitigate its losses so the financial impact of such mitigation can be measured and a determination can be made by the practitioner as to what steps could or should have been taken by plaintiff.

139. The plaintiff's ability to mitigate is dependent upon several factors, which may include but are not limited to the following:

- *Plaintiff's financial ability to mitigate.* Mitigation of damages may not be possible if the plaintiff is financially unable to accomplish it.
- *The cost to mitigate as compared to the economic damages suffered by the plaintiff.* If the cost to mitigate is greater than the economic damage suffered as a result of the defendant's breach, it may not be possible for the plaintiff to mitigate the damages.

⁵ Robert L. Dunn, Recovery of Damages for Lost Profits 6.33, page 570 (6th ed. 2005).

Calculating Lost Profits

- *Technical barriers to mitigation.* The plaintiff's ability to mitigate may be affected by technology constraints or opportunities.
- *Market barriers to mitigation.* The plaintiff's marketing capabilities, taking into account its reputation, product quality, and product features, may have been affected by defendant's breach and affect its ability to mitigate damages.
- *Supply-oriented barriers to mitigation.* The defendant's breach may also have affected the plaintiff's ability to obtain goods and services from its suppliers necessary for production in order to mitigate its losses.
- *Timing issues impacting the mitigation of damages.* The plaintiff's knowledge of the event causing economic harm and the time required to implement a mitigation strategy may also affect mitigation.

140. The practitioner should consider whether revenues and/or profits earned subsequent to the breach are a mitigation of the economic damages caused by the defendant, thereby reducing damages, or are profits that would have been earned regardless of the breach and, therefore, would not offset damages claimed by plaintiff.⁶

⁶ *Ibid.*, 6.35, page 574.

CHAPTER 16: OTHER ISSUES AFFECTING LOST PROFITS ANALYSES

141. The practitioner will need to consider other issues when performing a lost profits analysis. Among the issues that need to be considered are:

- Distinguishing between violative and nonviolative acts
- Distinguishing various violative acts
- The impact of subsequent unexpected events
- Changes in the economic environment

DISTINGUISHING BETWEEN VIOLATIVE AND NONVIOLATIVE ACTS

142. The practitioner should be aware that not all acts may be violative (i.e., result in damages). The practitioner should consider only those acts which would have an impact upon the damage analysis. Nonviolative acts typically lack the requisite causal link between the act and damages.

DISTINGUISHING VARIOUS VIOLATIVE ACTS

143. In some instances, there may be multiple violative acts that result in damage. In the damage analysis, the practitioner should attempt to separately quantify the damage resulting from each act. If the acts are not “disaggregated,” findings may be challenged or the rejection of a claim for one act may result in refutation of the entire analysis. Practitioners should also ensure that damages computed for separate acts do not have an additive effect. In other words, damages may be common to both acts and cannot simply be added together to compute the total damages.

IMPACT OF SUBSEQUENT EVENTS

144. The practitioner should also consider the impact of events subsequent to the act causing damage. Such events may suspend the loss period, either temporarily or permanently, or may cause additional damage. Such intervening events may or may not be caused by the defendant, and the impact of those intervening events must be determined separately. See the discussion of ex ante and ex post methodologies in paragraphs 106 to 109.

CHANGES IN THE ECONOMIC ENVIRONMENT

145. The practitioner should also consider the impact of changes in the economic environment. Those changes may be general changes in the economy, such as inflation, general price erosion, or changes in demand, or they may be the result of actions taken by the defendant, such as price cutting or changing distribution methods. The impact of these events upon the analysis should be separately quantified, if possible.

CHAPTER 17: ALTERNATIVE DAMAGE MEASURES OTHER THAN LOST PROFITS

146. The practitioner should be aware that there are alternative measures of damages other than lost profits. Throughout this discussion, it is assumed that the plaintiff has been harmed and is entitled to damages resulting from the defendant's wrongful actions.

147. Alternative measures of damages other than lost profits will depend upon the facts and circumstances of the case. Consultation with legal counsel regarding the established legal framework and the applicable law may be necessary to determine the alternative damage measures.

OUT-OF-POCKET COSTS

148. A relatively straightforward method of calculating damages is based upon the out-of-pocket costs or investment the plaintiff has incurred in the project. Under this method, the out-of-pocket costs incurred related to the project are aggregated and become the measure of damages.

149. The practitioner needs to be diligent in obtaining appropriate back-up documentation pertaining to the costs involved including verifying that the costs incurred actually pertain to the project.

DECREASE IN VALUE CAUSED BY THE DEFENDANT'S MISCONDUCT

150. Damages under this approach are based upon the decrease in value caused by the defendant's misconduct. This approach to calculating damages is measured by the decrease in value as measured by the value prior to and subsequent to the defendant's misconduct. A business valuation or an appraisal of the underlying asset may be necessary in order to calculate this measure of damages. Additionally, some states may limit this measure of damages to only tort actions.

CHAPTER 18: SPECIALIZED DAMAGES AREAS

NEWLY ESTABLISHED BUSINESSES

151. For many years, court decisions adhered to the *new business rule*, which is that claims for lost profits of a newly established business are inherently speculative and, therefore, cannot be recovered. More recently, courts have been moving away from this general rule and have looked instead to the quality of the evidence submitted to determine whether or not the plaintiff has provided an adequate basis for a reasonable estimate of its damages. At least in part, this has been the result of the courts concluding that the former rule was unduly harsh and that a plaintiff should not be precluded from recovering its lost profits where the defendant's action has prevented the plaintiff from establishing a track record.

152. A plaintiff still has to show with reasonable certainty that, but for the actions of the defendant, it would have made a profit. Some of the factors that the practitioner should consider in assessing the likelihood of the plaintiff's success are as follows:

- The plaintiff's business plan
- The availability of the required capital for the business
- The plaintiff's prior experience in the area
- The plaintiff's level of expertise
- The plaintiff's subsequent experience
- Barriers to entry in the industry
- The quality of the available records
- The economy in which the business operates
- The experience of other similarly situated businesses

153. If it is possible to meet the legal requirements with respect to the fact of loss, the practitioner will also need to consider these factors, along with whatever other information is available, in preparing an estimate of the amount of the lost profits.

154. Although the general approach to the calculation of damages is the same as that discussed earlier with respect to an established business, less data are likely to be available. The practitioner may, therefore, need to make more assumptions. As in other areas, the practitioner needs to ensure that there is an adequate basis for the assumptions made.

INTELLECTUAL PROPERTY INFRINGEMENT DAMAGES

155. Intellectual property is a broad term encompassing a number of different types of property, including patents, copyrights, trademarks, and trade secrets. The scope of this practice aid does not include a detailed discussion of these types of damages. For a more in-depth discussion of this area, the practitioner should refer to AICPA Practice Aid 06-01, *Calculating Intellectual Property Infringement Damages*.

156. The measurement of damages in intellectual property cases can vary according to the particular type of intellectual property at issue.

157. In some instances, a plaintiff may elect to base its damage claims on the lost profits resulting from the infringement or misappropriation of intellectual property.

158. In patent infringement actions, the amount of damages awarded to the plaintiff should be sufficient to compensate for the infringement, but not less than the amount of a reasonable royalty. Lost profits are an alternative measure of damages to the reasonable royalty calculation. In the case of design patents, the award can include damages for unjust enrichment.

159. In copyright infringement cases, the measurement of damages may be based on various approaches, including lost profits. Other possible measurement approaches include royalty rates used for other transactions, the terms of other contracts for use of the copyrighted material, or a calculation of the decline in the market value of the copyrighted material as a result of the infringement.

160. In trademark cases, the alternative measurements of damages include lost profits, a reasonable royalty, and statutory damages. In addition, the Lanham Act explicitly authorizes a trademark owner to recover both the infringer's profits and its own damages sustained to the extent they are not duplicative.⁷

161. In trade secrets cases, the plaintiff's damages may also be measured in various ways, including lost profits, a reasonable royalty, and the unjust enrichment of the infringer. The Uniform Trade Secrets Act expressly provides that, in addition to recovering its actual loss, a trade secret owner may recover the "unjust enrichment" caused by the misappropriation to the extent the enrichment is not taken into account in calculating the owner's actual loss.⁸

⁷ AICPA Practice Aid 06-01, *Calculating Intellectual Property Infringement Damages*, page 22.

⁸ *Ibid.*

ANTITRUST VIOLATION DAMAGES

162. Antitrust law generally prohibits various forms of conduct that are considered to be anti-competitive. The Federal Trade Commission (FTC) is the government agency charged with enforcement of federal antitrust laws.

163. The statutes governing this area of law address such issues as monopolies, price discrimination, mergers, and unfair competition.

164. Plaintiffs in antitrust actions have to prove that the defendant's actions caused lost profits and that this resulted from the anticompetitive effect of an antitrust violation. The general standard for proving damages is a "just and reasonable estimate of the damage based on relevant data." (See *Bigelow v. RKO Radio*, 327 U.S. 251 1946 .) An antitrust plaintiff, however, must also prove antitrust injury in addition to the other common elements in a damages case, requiring the plaintiff to not only show that its injury is proximately caused by the defendant's wrongful conduct, but that the injury is "of the type the antitrust laws were intended to prevent." (See *Brunswick Corp. v. Pueblo Bowl-O-Mat*, 429 U.S. 477 1977 .) Because the focus of antitrust law is on the consumer, the plaintiff must be able to prove that competition was injured as a result of the defendant's conduct.

165. In claims involving the monopolization of, or attempts to monopolize, a market, it is necessary to address concepts such as the definition of the market, both in geographic and product terms, the substitutability of other products, and the level of potential competition.

166. In a case involving price-fixing, damages are normally computed based on an analysis of the higher prices paid by purchasers of the products or services in question. This may involve a comparison of pricing or profit levels before or after the time period during which the price-fixing occurred.

SECURITIES FRAUD DAMAGES

167. Claims by investors for damages resulting from the failure to disclose information that adversely affects the price at which a company's securities trade generally seek to recover the difference between the price at which the investors purchased the securities and the price which they would have paid had the information been disclosed.

168. Although this difference may be measured by the decline in the price of the securities when the adverse information was disclosed, it is necessary to consider the impact of other factors on the price of the securities.

E-BUSINESS IMPACT ON DAMAGES

169. Practitioners should also consider the impact of the new business models that may be associated with the expansion of e-business on traditional measures of lost profits. These include the availability and nature of data relating to those business models and the impact on the definition of markets and the impact on competition and market barriers, among others. The models developed by the practitioner to measure lost profits will need to account for these factors.

APPENDIX A: COMPARISON OF AICPA PROFESSIONAL STANDARDS AND FEDERAL RULE OF EVIDENCE 702

CP Professional Standards	Federal Rule of Evidence
<p>CP Scope of Expertise</p> <ul style="list-style-type: none"> • Accounting, auditing, tax, consulting, and other services 	<p>702(b)</p> <ul style="list-style-type: none"> • Scientific knowledge • Technical knowledge • Specialized knowledge
<p>CP Qualifications</p> <ul style="list-style-type: none"> • Education • Examination • Experience • Ethics AICPA Code of Professional Conduct 	<p>702(b)(1)</p> <ul style="list-style-type: none"> • Education • Knowledge • Experience • Training • Skill
<p>CP Code of Professional Conduct</p> <ul style="list-style-type: none"> • Rule 102, Termination of Membership (AICPA, Professional Standards, vol. 2, ET sec. 102.01) • Rule 201, General Standards (AICPA, Professional Standards, vol. 2, ET sec. 201.01) • Professional competence • Due professional care • Planning and supervision • Sufficient relevant data • Rule 202, Conflicts of Interest (AICPA, Professional Standards, vol. 2, ET sec. 202.01) 	<p>702(b)(2)</p> <ul style="list-style-type: none"> • Product of reliable principles and methods • Applied the principles and methods reliably to facts of the case • Sufficient facts or data

APPENDIX B: TESTIMONY PYRAMID

Consistent with AICPA *Professional Standards*, Rule 702 of the Federal Rules of Evidence requires expert testimony be based upon sufficient facts or data, be the product of reliable principles and methods, and that the principles and methods be reliably applied to the facts of the case. Graphically presented, the testimony pyramid might be as follows:



APPENDIX C: TYPICAL LITIGATION SERVICES

Practitioners may provide various types of services or functions in litigation engagements. Some of the more common include:

- Computation of economic damages:
 - o Lost profits
 - o Lost value
 - o Extra costs
 - o Lost cash flow
 - o Mitigation
 - o Restitution
 - o Punitive damage studies
- Professional standards analysis
- Valuation of the following:
 - o Business
 - o Pensions
 - o Intangibles
- Fraud prevention, detection, and investigation
- Bankruptcy consultant, trustee, and examiner
- Tax analysis, including the following:
 - o Tax basis
 - o Cost allocation
 - o Treatment of specific transactions
- Marital dissolution assessment and analysis
- Contract cost and claims analysis
- Historical results analysis
- Special accountings, tracing, reconstructions, and cash-flow analyses
- Antitrust analysis, including the following:
 - o Price fixing
 - o Market share
 - o Market definition

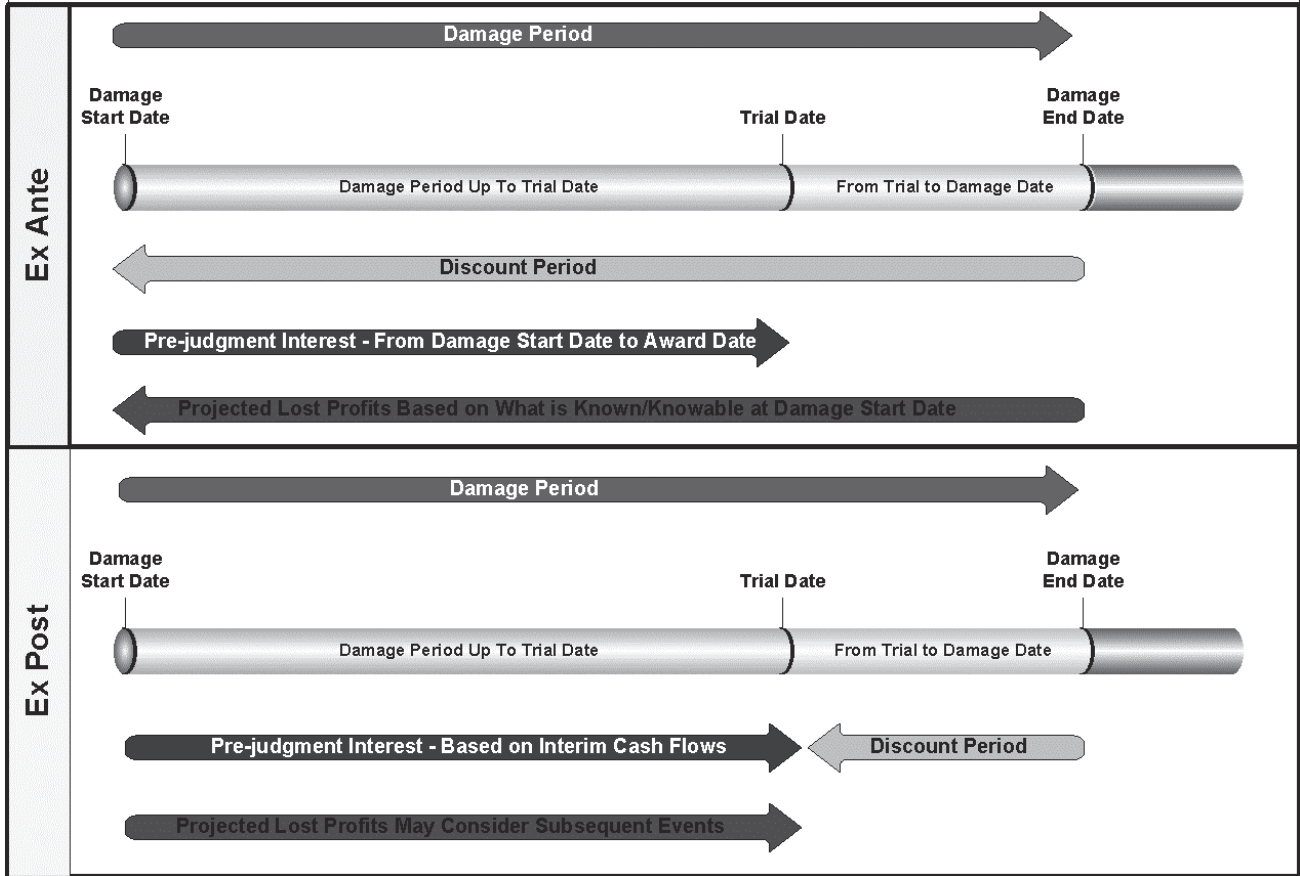
Calculating Lost Profits

- o Predatory conduct
- o Dumping
- o Price discrimination
- Business interruption and other insurance claims and assessments
- Attest services, if specifically engaged to perform them in connection with litigation services

Any of the following functions may be performed:

- Issue identification
- Locating other experts
- Fact finding, including the following:
 - o Asset searches
 - o Market studies
 - o Systems reviews
 - o Interviewing of witnesses
 - o Due diligence
 - o Research
- Analysis
 - o Investigative accounting
 - o Computer modeling
 - o Statistical
 - o Actuarial
- Discovery assistance
- Document management
- Settlement assistance
- Expert testimony
- Trial and deposition assistance
- Posttrial support (such as bookkeeping services and funds administration)
- Negotiations
- Arbitration
- Mediation
- Training
- Case evaluation

APPENDIX D: EX ANTE VERSUS EX POST



APPENDIX E: LIST OF CASES CITED

Cases Cited

American List Corp v. U.S. News World Report, Inc., 75 N. .2d 38, 550 N. .2d 590 (1989)

Bigelow v. RKO Radio, 327 U.S. 251 (1946)

Brunswick Corp. v. Pueblo Bowl-O-Mat, 429 U.S. 477 (1977)

Burger King Corp. v. Barnes, 1 F. Supp.2d 1367 (S.D. Fla 1998)

Daubert v. Merrill Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993)

Diesel Machinery, Inc. v. B.R. Lee Industries, Inc., 418 F.3d 820 (Fed. 8th Cir., 2005)

DSC Communications v. Next Level Communications, 107 F.3d 322, 329 (5th Cir. 1997)

Energy Capital v. United States, 302 F.3d 1314 (Fed. Cir. 2002)

Fairmont Supply Company v. Hooks Industrial, Inc., No. 01-03-01129-CV (T 8/4/2005)

Hadley v. Baxendale, 156 Eng. Rep. 145, 151 (Ex. 1854))

Hampton v. Federal Express Corp., 917 F. 2d 1119, 1125-26 (8th Cir. 1990)

Holt Atherton Ind., Inc. v. Heine, 835 S.W.2d 80 (Tex. 1992)

Knox v. Taylor, 992 S.W.2d 40 (Texas 1999)

Kool, Mann, Coffee Co. v. Coffey, 300 F.3d 340 (3d Cir. 2002)

Kumho Tire Company, Ltd. v. Patrick Carmichael, 526 U.S. 137 (1999)

Olson v. Nieman's Inc., 579 N.W.2d 299 (Iowa 1998)

Schonfeld v. Hilliard, 62 F. Supp 2d 1062, 1074 n. 6 (S.D.N. . 1999)

Universal Commodities, Inc. v. Weed (449 S.W. 2d 106 (Tex. Civ. App. 1969))

APPENDIX F: LOST PROFITS RESOURCES (NONEXHAUSTIVE LIST)

APPLICABLE SPECIAL REPORT AND PRACTICE AID

Consulting Services Special Report 03-1, *Litigation Services and Applicable Professional Standards*

Practice Aid 04-1, *Engagement Letters for Litigation Services*

Practice Aid 93-4, *Providing Litigation Services*

Practice Aid 96-3, *Communicating in Litigation Services: Reports*

BOOKS

Dunn, Robert L., *Recovery of Damages for Lost Profits*, 6th ed. Alameda, CA: Lawpress Corporation, 2005 (800) 622-1181 (www.lawpresscorp.com)

Weil, Roman L., Michael . Wagner, and Peter B. Frank, *Litigation Services Handbook The Role of the Financial Expert*, 3rd ed. Hoboken: John Wiley Sons, 2001 (201) 748-6011 (www.wiley.com)

Cerillo, William A., *Proving Business Damages*, 2nd ed. Hoboken: John Wiley Sons, 1991, (201) 748-6011 (www.wiley.com)

Hitchner, James R., *Financial Valuation, Applications and Methods*. Hoboken: John Wiley Sons, 2003, (201) 748-6011 (www.wiley.com)

Trugman, Gary R., *Understanding Business Valuation*, 2nd ed. New York: American Institute of Certified Public Accountants, 2002, (201) 938-3245 (www.aicpa.org)

Pratt, Shannon P., Reilly, Robert F., Schweihs, Robert P., *Valuing a Business, The Analysis and Appraisal of Closely Held Companies*, 4th ed. New York: McGraw-Hill, 2000.

PPC's Guide to Litigation Support Services, 10th ed. Dallas: Practitioners Publishing Company, 2005, (800) 323-8724 (www.ppc.thomson.com)

*Calculating Lost Profits***OTHER**

Dunn, Robert and Everett P. Harry, "Modeling and Discounting Future Damages," *Journal of Accountancy*, January 2002, pages 49-55

CPA Expert, American Institute of Certified Public Accountants, (888) 777-7077 (www.cpa2biz.com)

Business Valuation and Forensic and Litigation Services Special Reports, Practice Aids,
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Title	Series	Product
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Accounting Letters for Statutory	04-1	055298
Interest		
Business Valuation	02-1	055296
California's Financial Forensic	98-2	055293
Personal Financial Forensic		
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Forensic Accounting	9-1	055001
Statutory and Case Law		
Costs of Interest	96-3	055000
Forensic Accounting		
California	06-3	055302
Professional Tariffs	93-4	055145
Forensic Accounting	06-2	055301

Appendix F: Lost Profits Resources Nonexhaustive List

Title	Description	Product Code
Other Consulting Practice Aids		
Assistant Financial Role Sessions	92-8	055140
Other Publications		
CPA's Essential Close Relationships		056601
Software (running on Word)		
Essential Consultant Cost Review Checklist for Tax Profits		055010
Consultant Letters and Checklists		055011

To obtain any of these publications, call the AICPA Order Department at 1-888-777-7077, option 1 or order via fax at 800-362-5066 or on-line at <http://www.cpa2biz.com/store>.

EXHIBIT D

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

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ABDIQAFAR WAGAFE, et : NO.
al, :
 : 2:17-cv-00094-
Plaintiffs, : RAJ
 :
v. : CONFIDENTIAL
 :
DONALD TRUMP, President :
of the United States, :
et al., :
 :
Defendants. :

- - -
Friday, October 30, 2020
- - -

WebEx videotaped deposition of
BERNARD SISKIN, Ph.D., pursuant to
notice, was held beginning at 10:09 AM,
on the above date, taken stenographically
before Constance S. Kent, a Certified
Court Reporter, Registered Professional
Reporter and Notary Public.

* * *

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I N D E X

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NO.	DESCRIPTION	PAGE
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Exhibit Siskin-2	Amended Report by Bernard R. Siskin, Ph.D., dated 7/17/20	97
Exhibit Siskin-3	Document Label External Vetting, Bates DEF-429774 through 429777	120
Exhibit Siskin-4	Responsive Report by Bernard R. Siskin, Ph.D., dated 10/13/20	353

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2 DEPOSITION SUPPORT INDEX

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4

5 Direction to Witness Not to Answer

6 Page Line Page Line Page Line

7 None

8

9

10 Request for Production of Documents

11 Page Line Page Line Page Line

12 None

13

14

15 Stipulations

16 Page Line Page Line Page Line

17 None

18

19

20 Question Marked

21 Page Line Page Line Page Line

22 None

23

24 THE VIDEOGRAPHER: Good

1 morning. We are now the record.

2 This begins Videotape No. 1
3 in the deposition of Dr. Bernard
4 Siskin in the matter of Abdiqafar
5 Wagafe v. Donald Trump, President
6 of the United States, et al.

7 Today is Friday,
8 October 30th, 2020, and the time
9 is now approximately 10:09 AM
10 eastern time.

11 This deposition is being
12 taken at WebEx virtual location.

13 The videographer is Jacob
14 Uscinowicz of Magna Legal
15 Services, and the court reporter
16 is Constance S. Kent of Magna
17 Legal Services.

18 Will counsel and all parties
19 present state their appearances
20 and whom they represent.

21 MR. HANDEYSIDE: Hugh
22 Handeyside, American Civil
23 Liberties Union on behalf of the
24 plaintiff.

1 MR. TARANTO: Leon Taranto,
2 Department of Justice, Civil
3 Division, on behalf of the
4 defendants.

5 MR. HOGLE: And this is
6 Charlie Hogle, American Civil
7 Liberties Union on behalf of
8 plaintiffs.

9 MS. BRAGA: Victoria Braga,
10 Department of Justice, on behalf
11 of defendants.

12 THE VIDEOGRAPHER: Will the
13 court reporter please swear in the
14 witness.

15 BERNARD SISKIN, having been
16 first duly sworn, was examined and
17 testified as follows:

18 - - -

19 E X A M I N A T I O N

20 - - -

21 BY MR. HANDEYSIDE:

22 Q. Good morning, Dr. Siskin.

23 My name is Hugh Handeyside.

24 A. Good morning.

1 perhaps, Charlie, if we can chart
2 with the Kruskol supplemental
3 expert report dated July 17th.

4 BY MR. HANDEYSIDE:

5 Q. And Dr. Siskin, if it's
6 easier than following along on the
7 screen, it's fine with me if want to look
8 at your hard copy.

9 Is that what you're doing?

10 A. Yeah, it will be easier for
11 me.

12 Q. Okay.

13 MR. HANDEYSIDE: Then --
14 then for now we don't need to --
15 to use this as an exhibit,
16 Charlie. I think we can just --

17 THE WITNESS: Just to make
18 sure, this is the -- make sure I
19 have the right one here. Second
20 supplementary or the --

21 BY MR. HANDEYSIDE:

22 Q. I'm looking at the
23 supplemental expert report of Sean
24 Kruskol, which is dated --

1 A. July 17th.

2 Q. -- July 17th, 2020.

3 A. Yeah. I have it, yes.

4 Q. Okay. So if you could just
5 start with his summary opinion -- summary
6 of opinions on page 3. And just starting
7 with paragraph 7A. It states:

8 "For applications received
9 between October 1st, 2012, and
10 September 30th, 2019, applications
11 subject to CARRP were pending as
12 of September 30th, 2019, at
13 approximately one-and-a-half times
14 the rate of applications not
15 subject to CARRP."

16 Is that statement true as a
17 mathematical matter?

18 A. I believe so sitting here.
19 As I said, I think he's -- without going
20 through my report, but basically I agreed
21 with his arithmetic in all cases.

22 Q. Okay. And I understand that
23 your position is that that data is better
24 presented as set forth in Exhibits BB, BC

1 makes the conclusions, but the
2 conclusions clearly are clear that I made
3 and were consistent is that to those
4 sent -- those processed through CARRP it
5 will take longer. For those processed --

6 Q. I didn't mean to cut you
7 off. For those processed through CARRP
8 it will take longer?

9 A. For those processed,
10 referred to CARRP, they're more likely to
11 be denied than those not processed --
12 those not referred to CARRP.

13 Q. Okay. Understood.

14 All right. So then for
15 paragraph 7B, he states that:

16 "For applications received
17 between October 1st, 2012, and
18 September 30th, 2019, USCIS denied
19 applications subject to CARRP at
20 two-and-a-half times the rate of
21 applications not subject to
22 CARRP."

23 And sort of the same thing,
24 is that statement true as a mathematical

1 matter?

2 A. Yes.

3 Q. And so there's no question
4 that the denial rate for those processed
5 under CARRP is significantly higher than
6 the denial rate for those not processed
7 under CARRP?

8 A. Yeah, I think it's not
9 disputed that if you're referred to
10 CARRP, your chances of being denied will
11 be higher than if you were not referred
12 to CARRP.

13 Q. And I believe that you
14 characterized it as significantly higher;
15 is that right?

16 A. Yeah, it is significantly
17 higher.

18 Q. Okay. And the same deal for
19 paragraph 7C:

20 "From fiscal year 2013 to
21 fiscal year 2017, the percentage
22 of forms I-45 received and
23 subjected to CARRP decreased by
24 approximately 13 percent."

1 adjudications by USCIS decision
2 Form N-400 subject to CARRP was
3 approximately 27 percent and
4 occurred between fiscal year 2018
5 and fiscal year 2019."

6 Same deal, descriptive
7 matter that's accurate, right?

8 A. I believe so.

9 Q. And then for paragraph 7G:

10 "For applications received
11 between October 1st, 2012, and
12 September 30th, 2019, USCIS
13 subjected Forms I-485 from
14 applicants from Muslim majority
15 countries to CARRP at over ten
16 times the rate of those Forms
17 I-485 from applicants from
18 non-Muslim majority countries."

19 That's also correct?

20 A. Mathematically that's
21 correct, I believe.

22 Q. And I understand --

23 A. And -- so the record is
24 clear, to the extent these statements are

1 slightly offered -- off, it's my report
2 and you will note -- but my
3 recollection -- without looking at my
4 report, my recollection these
5 arithmetically were correct.

6 Q. Understood and that's fair.

7 And I -- I understand that
8 your calculations indicate that I-485
9 applications submitted by applicants from
10 countries with a majority Muslim
11 population were referred to CARRP at 10.9
12 times the rate of those from countries
13 without a majority Muslim population; is
14 that right?

15 A. Again, it sounds about
16 right, and it was -- it was above ten to
17 my recollection. I don't remember the
18 exact -- without looking it up, I can't
19 tell you the exact number.

20 Q. Okay. And paragraph 7H,
21 similarly:

22 "For applications received
23 between October 1st, 2012, and
24 September 30th, 2019, USCIS

1 subjected Forms N-400 from
2 applicants from Muslim majority
3 countries to CARRP at 12 times the
4 rate of those forms N-400 from
5 applicants from non-Muslim
6 majority countries."

7 That's correct as well,
8 right?

9 A. I believe so.

10 Q. And I understand that
11 specifically, according to your
12 calculations, N-400 applications
13 submitted by applicants from countries
14 with a majority Muslim population were
15 referred to CARRP at 12.2 times the rate
16 of those from countries without majority
17 Muslim population, is that your
18 recollection?

19 A. That's correct. I think
20 it's undisputed here that referrals to
21 CARRP for Muslims or non-Muslims is a
22 rare event, but that the likelihood of
23 being sent from a Muslim country is
24 significantly higher than that of someone

EXHIBIT E

IN THE UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON AT SEATTLE

Abdiqafar Wagafe, et al.,)
on behalf of himself and)
others similarly situated,)
)
Plaintiffs,)
)
vs.) 2:17-CV-00094-RAJ
)
DONALD TRUMP, President of the)
United States, et al.,)
)
Defendants.	

The virtual videotaped deposition via Webex of SEAN KRUSKOL, called by the Defendants, taken pursuant to the Federal Rules of Civil Procedure of the United States District Courts pertaining to the taking of depositions, taken before PEGGY CURRAN, CSR, CRR, RPR, CSR License No. 084-002016, a notary public within and for the County of DuPage and State of Illinois, taken at Chicago, Illinois on Tuesday, October 20, 2020, commencing at the hour of 9:07 a.m. CT

CONFIDENTIAL DUE TO PROTECTIVE ORDER

REPORTED BY: Peggy Curran, CSR, CRR, CMR
 CSR No. 084-002016
 Magna Legal Services
 866-624-6221
 www.MagnaLS.com



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9

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14

15 Also Present:

16 Mr. Brian C. Kipnis

Assistant United States Attorney

17

Ms. Caitlin E. Miller

18

Ms. Jessica Schau Nelson

19

Mr. Tyler Crotty - Magna Videographer

20

21

22

23

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1 THE VIDEOGRAHER: We are now on the record.
2 This begins the videotaped deposition of Sean
3 Kruskol in the matter of Abdiqafar Agafe v. Donald
4 Trump, President of the United States, et al. in
5 the United States District Court for the Western
6 District of Washington at Seattle.

7 Today is October 20, 2020, and the time is
8 9:07 a.m.

9 This deposition is being taken remotely
10 via Zoom. The videographer is Tyler Crotty of
11 Magna Legal Services. And the court reporter is
12 Peggy Curran, also of Magna.

13 Counsel, at this time I would ask if you
14 would please state your appearances and whom you
15 represent for the record.

16 MR. TARANTO: Leon Taranto for the defendant,
17 Department of Justice, Civil Division.

18 MR. AHMED: Is there anyone else for
19 defendants?

20 MR. TARANTO: Brian Kipnis will be joining for
21 the defendants.

22 MR. AHMED: Sameer Ahmed --

23 MS. BRAGA: Sorry. Victoria Braga for
24 defendants.

25 MR. AHMED: All right. Sameer Ahmed on behalf

1 of plaintiffs.

2 THE VIDEOGRAPHER: Thank you.

3 Could the court reporter please swear in
4 the witness.

5 MS. REPORTER: Would you -- first off, is
6 everybody in agreement that we can swear the
7 witness remotely, virtually?

8 MR. TARANTO: Yes, please.

9 MS. REPORTER: Mr. Ahmed?

10 MR. AHMED: Yep.

11 (Witness virtually duly sworn.)

12 THE VIDEOGRAPHER: Leon, before we begin, it
13 seems like that echo is still existing. So I am
14 wondering if maybe -- I don't know if you want to
15 go off the record to do this or if you have your
16 headphones readily available, but I think it's a
17 good idea to try --

18 MR. TARANTO: Let's go off the record and I
19 can try it. Okay.

20 THE VIDEOGRAPHER: We are going off the
21 record. The time is 9:09 a.m.

22 (A recess was had.)

23 THE VIDEOGRAPHER: We are back on the record.
24 The time is 9:10 a.m.

25

1 SEAN KRUSKOL,
2 called as a witness herein, having been first duly
3 virtually sworn, was examined and testified as
4 follows:

5 EXAMINATION

6 By Mr. Taranto:

7 Q Mr. Kruskol, can you confirm that no one
8 is going to be in the room or is in the room with
9 you during the deposition?

10 A I can --

11 MR. AHMED: Objection, compound.

12 A -- confirm.

13 MR. TARANTO: I'm sorry, counsel?

14 MR. AHMED: I objected because that was a
15 compound question.

16 By Mr. Taranto:

17 Q Okay. Can you confirm that no one is in
18 the room with you now during this deposition?

19 A I confirm.

20 Q All right. Do you understand and agree,
21 Mr. Kruskol, that you will not have any email or
22 other communication systems open or communicate
23 with counsel while sitting in this deposition?

24 MR. AHMED: Objection, compound.

25

1 of my conclusions when I discuss trend analyses or
2 increases and decreases in the percentages of
3 applications, either subject to CARRP or from
4 Muslim majority, I don't recall exactly, and
5 changes one of my words from decrease to increase
6 or vice versa.

7 In addition, I believe he calculates the
8 number of potential duplicates that I find based on
9 my analysis inappropriately. I recall that he
10 identified as the number of unique records; not the
11 number of potential duplicates.

12 For example, if we have a row of data
13 and a column of data, that's just one by four, and
14 in that data set we have the values of 1, 2, 2, and
15 3, there are four records in the data, there are
16 two duplicates, but then by removing one duplicate,
17 you would be left with one unique record in a total
18 of three unique records.

19 In addition, I think that Dr. Siskin is
20 inappropriately conflating the birth rate of twins
21 in the United States to potential duplicate records
22 that may exist from applicants that are not U.S.
23 citizens and not born in the U.S.

24 In addition, I believe it's
25 inappropriate to compare a potential error rate in

1 MR. AHMED: Objection, calls for speculation.
2 Objection to the extent you aren't accurately
3 quoting the CDC report or Dr. Siskin's report.

4 THE WITNESS: So I understand the hypothetical
5 correctly, you rounded approximately 348,000
6 applicants up by 2,000 applicants, to 350,000
7 applicants, and applied that that would be an
8 acceptable rate of twin births identified in a
9 population. Assuming your math is correct, I do
10 believe I track your hypothetical.

11 However, I do not see --

12 By Mr. Taranto:

13 Q Let me just interject. The number was
14 349,800, which I rounded up to 350,000. I'm sorry.

15 A Thank you. Thank you.

16 MR. AHMED: Same objection as before.

17 THE WITNESS: So I agree that it's very
18 possible or it is possible that there are entries
19 that are within the data set twice that are not the
20 same person. But the rate of twins does not
21 explain why I identified 24 records with the same
22 form number, applicant age, applicant sex,
23 applicant country of birth, et cetera.

24 By Mr. Taranto:

25 Q How many instances did you find

1 A I did not undertake that analysis and
2 don't know the answer one way or another.

3 Q In Exhibit BH, this is your list of your
4 top 10 results of findings of apparent duplicates.
5 Did you create another list or a more extensive or
6 more full list of your -- the potential duplicates
7 you found?

8 A I do not recall creating such a list.

9 Q How did you -- did you do some type of
10 search for duplicates and just looked at the data
11 on some type of spreadsheet?

12 MR. AHMED: Objection; vague.

13 MR. TARANTO: Yes. I am sorry. Let me
14 withdraw that.

15 By Mr. Taranto:

16 Q Can you explain what you did to display
17 duplicates or count the duplicates?

18 A Sure. So I was provided 10.6 million
19 records of USCIS data. That data is too large to
20 be analyzed via a program such as Microsoft Excel.
21 So as a result, I needed to load that data into our
22 data analytics tool and write what I call a script
23 or a program in SQL, S-Q-L, or like a movie sequel
24 or book sequel, and based on the results of my
25 query I was able to determine the count of

1 potential duplicates, as well as export the top 10
2 results from my analysis.

3 Q And did you in some way preserve the
4 listing or the search results?

5 A Can you clarify what you mean by "search
6 results"?

7 Q You ended up getting a result showing
8 over 200,000 potential duplicates. Is there a way
9 that we can see what you found?

10 A I believe what I found is listed in
11 Exhibit BH.

12 Can you clarify the question, please?

13 Q BH lists your top, your top 10 or top
14 whatever number it is, of the 213,647 potential
15 duplicates. So we are interested in the rest of
16 them.

17 Is there a way we can find out what
18 other ones you say are potential duplicates?

19 MR. AHMED: I just want to object. You are
20 using the word "we." And I don't know who is
21 interested in --

22 MR. TARANTO: Defendants.

23 MR. AHMED: -- the rest of the potential
24 duplicates.

25 MR. TARANTO: Defendants.

EXHIBIT F
FILED UNDER SEAL