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Forensic Accounting

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FORENSIC ACCOUNTING

Global Edition

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Preface

This text is the first to provide a comprehensive view of what forensic accountants actually do and how they do it. With experience as both practitioners and educators, we offer a unique perspective that bridges the gap between theory and practice. Our objective is to introduce students to the knowledge and skills required in the practice of forensic accounting. As emphasized throughout the text, the scope of forensic accounting services extends far beyond the realm of fraud investigation, which is commonly emphasized in academic settings. Despite the engagement-specific nature of the work, forensic accounting engagements share common elements such as gathering and analyzing evidence, interpreting and communicating findings, and applying specialized knowledge. The building-block structure of this text is designed to guide students through each component, in the context of real-world situations.

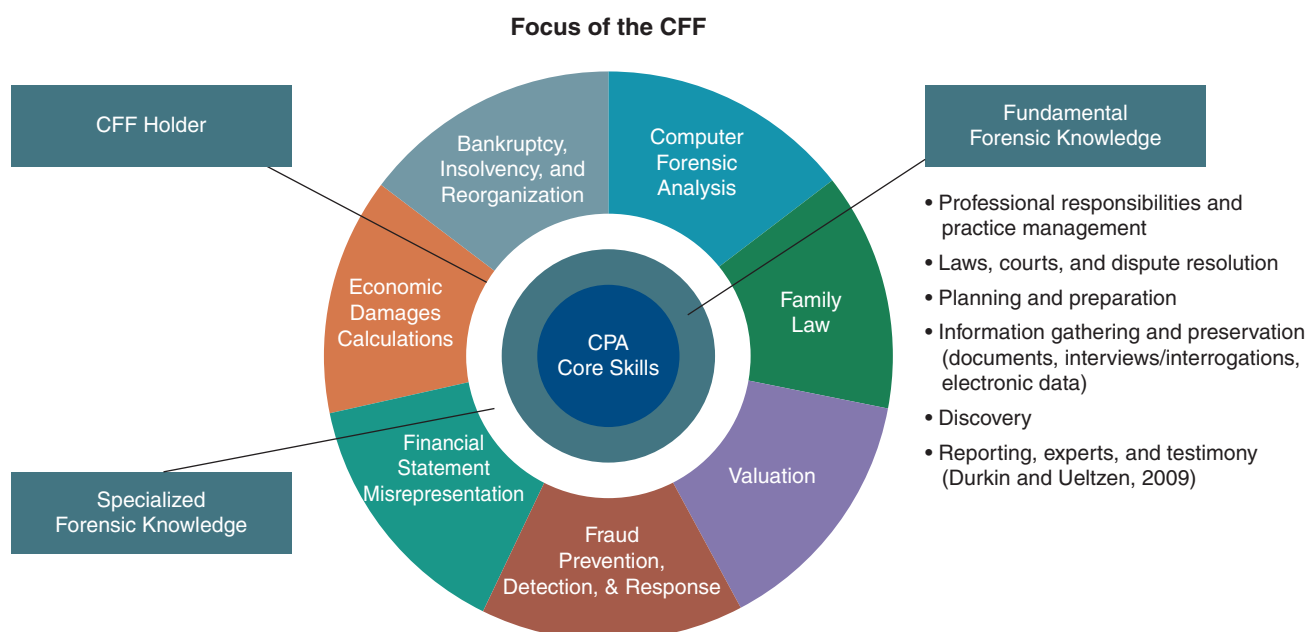
Although intended primarily for use in upper-level undergraduate or graduate courses, this text is also a valuable resource for new practitioners or even seasoned practitioners seeking a review of critical concepts.

FORENSIC ACCOUNTING KNOWLEDGE AND SKILLS

Consistent with the AICPA curriculum for the Certified in Financial Forensics (CFF) credential, this text highlights a three-layer skill set for forensic accountants:

1. core skills,
2. fundamental forensic knowledge, and
3. specialized forensic knowledge.

As illustrated, the center of the CFF Wheel is core skills. These skills, which are considered prerequisites for this text, include functional competencies in accounting, economics, and finance. Armed with core skills, students can use this text as a springboard for developing both fundamental and specialized forensic knowledge.



Source: From the *International Glossary of Business Valuation Terms*. Reprinted by permission of the American Institute of CPA's.

Areas of fundamental forensic knowledge include the legal environment, engagement planning, methods of analysis, report writing, and professional responsibilities. Specialized knowledge, in contrast, pertains to specific practice niches such as fraud, business valuation, family law, economic damages, bankruptcy, and computer forensics.

Fundamental Forensic Knowledge

Students begin the development of fundamental forensic knowledge in **Chapter 2**, with a comprehensive discussion of the legal environment of forensic accounting. This discussion includes a description of the anatomy of a trial, along with explanations of the key concepts of discovery, evidence, expert methodology, expert opinions, and attorney-client privilege.

Chapter 3 highlights the importance of screening and staging engagements, primary factors to consider before accepting an engagement, necessary elements of engagement letters, and considerations involved in framing a case. This chapter also explores a scientific approach to forensic accounting engagements and demonstrates the value of different forms of research.

Chapter 4 introduces students to interactive evidence, specifically evidence gathered through interviews and observations. Key learning objectives include an understanding of the communication process, the ability to implement the concept of active listening, and an appreciation of the significance of body language. Students also learn the different types of interviews, interview questions, and stages of an interview.

Chapter 5 discusses financial statements analysis in a forensic accounting context. This chapter is designed to challenge the assumed reliability of the financial reporting process. Part of this challenge involves looking beyond the numbers to the context of financial statements. In addition to basic analytical techniques, students learn the value of nonfinancial measures and the footnotes to financial statements.

In **Chapters 8 and 9**, the text transitions from gathering evidence to analyzing evidence. Analysis, along with interpretation, is necessary for the development of meaningful conclusions. **Chapter 8** explains how to frame the data analysis task and introduces various tools and techniques commonly used by forensic accountants. In **Chapter 9**, students learn analytic methods appropriate for large volumes of quantitative data. The operative focus, which extends to all areas of forensic accounting, is sufficient relevant data.

Although highlighted throughout the text, **Chapter 10** provides a focused discussion of the forensic accountant's specific professional responsibilities—to the client, the court, the profession, and the public.

Development of fundamental forensic knowledge concludes with **Chapter 12**. Section 12.1 introduces the concept of method of proof, highlighting the differences between direct and indirect methods of proof. Students learn about specific indirect methods of proof used by forensic accountants, circumstances in which they are used, and the respective strengths and weaknesses of each method. Section 12.4 addresses the report writing task, which is arguably the most critical element of the engagement process, representing the culmination of all preceding efforts. Although the form and content of any report is determined by the nature, scope, purpose, and terms of the specific engagement, students learn that forensic accountants must adhere to applicable judicial mandates and professional guidelines.

Specialized Forensic Knowledge

This text presents discussions of four areas of specialized knowledge: fraud (**Chapters 6 and 7**), business valuation (**Chapter 11**), economic damages (**Chapter 12**), and computer forensics (**Chapter 12**). Although limited in scope, these discussions equip students with a working knowledge of key issues in each specific area. According to recent AICPA surveys, and consistent with our professional experience, these areas comprise the vast majority of actual forensic accounting engagements.

UNIQUE FEATURES

A Case-Based Instructional Design

A unique feature of this text is its case-based instructional design, in which each chapter is accompanied by a case that highlights key issues addressed in the chapter. The cases are sometimes presented in their entirety at the beginning of the chapter and sometimes split into a prologue and epilogue. We make the cases an integral part of the text by including references throughout the body of each chapter and revisiting the cases in the end-of-chapter exercises. Also included in some of the end-of-chapter exercises are smaller cases that highlight specific applications.

Case-based instruction provides situational context that increases student understanding and facilitates the integration and application of diverse concepts. Moreover, the use of cases promotes critical thinking and active learning, providing students with the opportunity to recognize problems, make assessments, and define solutions. Such an approach is essential in the instruction of forensic accounting, given its context-specific nature. Unlike other sciences, forensic accounting does not address abstract problems. Rather, each engagement involves a unique purpose, situation, and cast of characters.

Because most of the cases used in this text are products of our professional experiences, they represent authentic scenarios that students can expect to encounter in their careers. Unlike hypothetical cases found in many texts, we present real narratives involving real people and consequences. The cases are comprehensive, providing the levels of breadth and depth necessary to facilitate meaningful analysis and discussion. Several of the case narratives include detailed accounts of trial proceedings, offering students an up-close perspective of forensic accounting in action. Moreover, records of some cases are available in the public domain, allowing students to exercise their research skills in gathering additional information.

The Scientific Approach

Another unique feature of this text is its emphasis on the scientific approach. The text advocates the scientific process as the most effective and efficient approach for gathering, synthesizing, and summarizing evidence—the basic functions of a forensic accounting engagement. Our experience as practitioners confirms the value of the scientific approach in bringing order and reasoning to forensic accounting engagements. Moreover, the approach enhances the credibility of a forensic accountant's analysis and conclusions, which is critical for expert witness testimony.

Using scientific methods introduced in **Chapter 3** and advocated throughout the text, students employ the scientific approach step by step in **Chapter 7** to complete their first forensic accounting assignment—a fraud investigation involving Mountain State Sporting Goods.

Special Elements

We incorporate a variety of special elements throughout the text, including:

- *Special notes* that provide greater detail or clarification
- *Working examples* that facilitate application and discussion
- Opportunities for students to *dig deeper* through independent exploration
- Challenges in which students apply reasoning skills to *think about it*
- *Cautions* that every forensic practitioner should consider
- *Practitioner's perspectives* through which the authors share insights gained through their experiences

Also included as exhibits and appendices to various chapters are examples of documents that forensic accountants commonly encounter in practice, such as a legal complaint, an engagement letter, interview transcripts, and financial statements. As with the cases, these are drawn from our professional experiences in actual cases.

End-of-Chapter Exercises

The end-of-chapter exercises provide several different types of learning opportunities for students. Short-answer **Chapter Questions** and **Multiple-Choice Questions** focus attention on key chapter concepts and terminology. **Workplace Application** projects are more abstract in nature, challenging students to apply key concepts and exercise critical thinking. Consistent with the scientific approach, **Chapter Problems** require students to independently explore the chapter content in more depth, thereby practicing a required skill of forensic accountants. Finally, each chapter includes (in the chapter interior or the end-of-chapter exercises) one or more **Cases** that require students to integrate several chapter learning objectives to analyze a problem and arrive at a solution. The **Workplace Applications**, **Chapter Problems**, and **Cases** also provide opportunities for students to enhance their skills in business writing, online research, and use of spreadsheet software.

SUPPLEMENTS FOR INSTRUCTORS AND STUDENTS

Instructor's Solutions Manual

Comprehensive solutions, prepared by the authors, are provided for all end-of-chapter material. The manual includes a chapter-by-chapter listing of problems correlated to each learning objective.

Test Item File

This is a ready-to-use bank of testing material that contains, for each chapter, a variety of types of questions. For ease of use, each question is linked to chapter objectives and also provides a suggested difficulty level.

TestGen

This testing software is designed to aid in creating custom tests in minutes. Features include question randomization, a point-and-drag interface, and extensive customizable settings.

PowerPoint Presentation

Complete PowerPoint presentations are provided for each chapter. Instructors may download and use each presentation as is or customize the slides. Each chapter's set of PowerPoints allows instructors to offer an interactive presentation using colorful graphics, outlines of chapter material, and graphical explanations of difficult topics. This supplement is available online at www.pearsonglobaleditions.com/rufus.

Course Companion Web Site

This web site, www.pearsonglobaleditions.com/rufus, provides additional resources for students and faculty, including links to articles cited in the text.

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1

Introduction to the World of Forensic Accounting

INTRODUCTION

On April 23, 1930, the Chicago Crime Commission issued its first Public Enemies List. At the top of the list was Alphonse Capone (also known as “Big Al,” “Scarface,” and “Big Shot”), one of the most notorious gangsters in U.S. history. Unable to convict Capone of murder,* the U.S. Attorney’s Office aggressively pursued criminal prosecution against him in an effort to “restore respect for federal laws” that had been eroded by the gangster class.¹ On March 13, 1931, a secret federal grand jury issued an indictment against Capone charging him with tax evasion for year 1924. Similar indictments for years 1925 through 1928 followed shortly thereafter. The Internal Revenue Service (IRS)[†] estimated Capone’s annual gross earnings (from gambling, prostitution, and bootlegging) at more than \$100 million.² *The government’s challenge, however, was proving it.*

Capone maintained no bank accounts, kept no activity records, bought no property in his own name, conducted all his financial transactions in cash, and *never filed a tax return*. Moreover, Capone’s reputation for violence created a strong disincentive for any potential informants. In the eyes of most, Capone was bigger than the government . . . and certainly more deadly.

Development of the case against Al Capone was assigned to IRS Special Agent Frank J. Wilson. Wilson’s assignment was to find evidence that would persuade a jury *beyond a reasonable doubt* (the standard of proof for conviction in a criminal case) of Capone’s guilt. The investigation included hundreds of witness



Al Capone

Source: www.fbi.gov

Learning Objectives

After completing this chapter, you should be able to:

- L01.** Explain what forensic accounting is.
- L02.** Identify common types of forensic accounting engagements.
- L03.** Compare and contrast the role of the forensic accountant with the roles of transactional accountants and auditors.
- L04.** Identify the necessary skills of forensic accountants.
- L05.** Recognize major providers of forensic accounting certification and continuing education.
- L06.** Identify potential careers in forensic accounting.

* The St. Valentine’s Day Massacre of February 14, 1929, was ascribed to Capone, although Capone himself was in Florida on that date. Capone was also suspected of murdering Assistant State’s Attorney W.H. McSwiggin on April 26, 1926.

[†] Then called the Bureau of Internal Revenue.



IRS Special Agent Frank Wilson

Source: www.life.com

interviews, wiretaps, and search raids, which failed to produce sufficient evidence. Near a point of hopelessness, Wilson took a second look at the evidence and discovered his first key witness—Leslie A. Shuway. Shuway, one of Capone’s former gaming parlor cashiers, was a waterfall of information. He identified Capone as the principal owner of a gambling syndicate and confirmed amounts paid to Capone. He also identified other individuals (leads) who could provide additional evidence against Capone.

The testimonial evidence gathered by Wilson was compelling, but not convincing beyond a reasonable doubt. The government’s challenge was to explain to the jury the complexities of accounting and tax in a manner that was not only persuasive, but could also withstand the test of cross-examination. Meeting this challenge head on, Wilson developed and presented to the jury a calculation of Capone’s unreported taxable income using what he called the “net worth method.”[‡] The underlying theory of this method is quite simple—you can’t spend what you don’t have. Wilson’s analysis is summarized in Table 1-1.

Special Note

The net worth method, which is fully explained in Chapter 12, is an application of deductive reasoning. As discussed later in this chapter, deductive reasoning reaches a conclusion (unreported income) through underlying propositions (cash spent versus cash available). The advantages of deductive reasoning (and the net worth method) are its intuitive appeal—it “makes good sense”—and its ease of application in certain situations.

On October 18, 1931, Al Capone was convicted of tax evasion for years 1925 through 1927 and failure to file income tax returns for years 1928 and 1929. Shortly thereafter, he was sentenced to 11 years in federal prison, fined \$50,000, and charged \$7,692 for court costs, in addition to a tax loss of \$215,000 plus interest. On November 16, 1939, Capone was released after serving seven years, six months, and fifteen days. Capone lived the balance of his life in seclusion, never returning to gangland politics. He died on January 25, 1947.

Table 1-1 | Net Worth Calculation

Step	Action	Example Calculation*
1	Determine ending net worth.	\$2.250m
2	Determine beginning net worth.	\$1.125m
3	Calculate the change in net worth during the period.	\$1.125m
4	Determine expenditures (consumption) during the period.	\$.500m
5	Calculate the sum of funds used for asset acquisitions and consumption.	\$1.625m
6	Calculate the sum of reported income and other legitimate sources of funds. (Remember, Capone never filed tax returns.)	-0-
7	Calculate the difference between legitimate sources and uses of funds, which indicates unreported income.	\$1.625m

* Numbers are for illustration purposes only.

[‡] Also known as the net worth plus expenditures method.

Dig Deeper

In February 2008, the IRS released for public view records related to Al Capone's criminal investigation. Such a release is highly unusual because all federal tax records are confidential by law. The records were released due to their historical significance and interest to the public. Students are encouraged to visit the IRS web site[§] to review copies of reports and letters that summarize the events and activities of the three-year investigation of Al Capone. Another information source is the FBI's Reading Room,^{**} which provides historical documents related to famous cases such as Capone's.

Frank J. Wilson, who was rightfully credited³ with bringing down Al Capone, is commonly recognized as the first forensic accountant. His net worth method was the first indirect method^{††} to receive judicial approval,⁴ and it continues to be used by IRS and FBI agents, as well as forensic accountants. Like Wilson, modern-day forensic accountants are often called upon to reconstruct missing or destroyed information, develop leads, interview witnesses, assist counsel in advancing (or challenging) the theory of a case, and communicate complex concepts to a jury. In addition to financial analysis, these diverse tasks require intellectual tools such as logic, reasoning, and intuition.

WHAT IS FORENSIC ACCOUNTING?

The term *forensic* is defined in *Black's Law Dictionary* as “used in or suitable to courts of law or public debate.”⁵ Extending this concept, we can define *forensic accounting* as the use of accounting theories, principles, or analyses in a legal action, often through expert witness testimony.

Other common definitions include the following:

- A discipline that deals with the relationship and application of financial facts to business problems, conducted in a legal setting.⁶
- A discipline that is focused on: (1) the prevention, detection, and investigation of both occupational fraud and financial statement fraud; and (2) the rendering of other litigation-support services.⁷
- The application of financial facts to legal situations.⁸

As will be explored throughout this text, forensic accounting involves the application of accounting, finance, economics, statistics, law, research, and investigative methods in the collection, analyses, and communication of findings. Given the adversarial nature of litigation, the role of a testifying forensic accountant is not suitable for everyone. Nonetheless, the unique skills of forensic accounting are valuable competencies that can easily be transferred to activities outside the courtroom.

The term *forensic accountant* was first used by Maurice Peloubet in 1946 in the *Journal of Accountancy*⁹ to recognize and celebrate IRS Special Agent Frank J. Wilson as the man who brought down Capone. Peloubet identified Wilson's “mindset” as the difference between accountants and forensic accountants. What is a mindset? More importantly, what is the mindset of a forensic accountant?

The Mindset of the Forensic Accountant

Broadly speaking, a person's *mindset* is his or her mental state, which evolves from education, experience, prejudices, and so on.¹⁰ Specifically, your mindset incorporates mental processes that dictate how you respond to situations or challenges. Activating one mindset instead of another may change your observations—what you see and how you see it,

[§] Can be accessed at <http://www.irs.gov/foia/article/0,,id=179352,00.html>

^{**} Can be accessed at <http://www.fbi.gov/foia/>

^{††} Indirect methods are necessary when, for whatever reason, books and records are inadequate to determine taxable income. As with Al Capone, indirect methods are often used against suspected recipients of illegal income. Other indirect methods include the bank deposits method, the expenditures method, and the reverse net worth method.

questions you ask, judgments you form, and decisions you make.¹¹ For example, auditors are prone to have a “same as last year” (or SALY) mindset, wherein they expect and accept findings consistent with prior years. A different mindset might start with the premise that something has changed, which requires a new assessment of risk and management.

Forensic accountants are both researchers and problem solvers. As such, they need to be intellectually curious. An intellectually curious individual possesses a restless mind—one that is never satisfied with his or her understanding of an issue, regardless of experience and expertise. Moreover, forensic accountants must have the instinct to explore problems that challenge conventional wisdom. Perhaps most importantly, they must be willing to question their own preexisting judgments and conclusions.

In addition to a curious mindset, forensic accountants must also embrace systemic thinking. For example, forensic accountants recognize that problems are not always attributable to negligence or misconduct. Instead, these problems may be indicators of broader systemic failures within an organization. Forensic accountants do not rush to judgment; they take a second look—and they look *beyond the numbers!*

Finally, forensic accountants must exercise a healthy dose of professional skepticism. This reflects a proactive, questioning mindset, where nothing is as it seems and “trust, but verify” is the general rule.

FORENSIC ACCOUNTING SERVICES

Forensic accountants are in major part defined by the nature of their work. Although most people equate forensic accounting with fraud, the scope of forensic accounting work is actually much broader. According to *Accounting Today’s* survey of the top 100 CPA firms, the most common forensic services are business valuations, fraud investigations, and litigation support.¹² For the past sixteen years, these service categories have been offered by a majority of the respondent firms. The results of a 2011 American Institute of Certified Public Accountants survey, illustrated in Figure 1-1, indicate that business valuations are by far the most significant practice component.¹³

A distinctive feature of this text is its comprehensive view of the forensic accounting profession, providing a more accurate picture of what forensic accountants actually do. The largest practice components, as identified in Figure 1-1 (fraud, business valuations, and economic damages) are discussed in detail in Chapters 6, 7, 11, and 12.

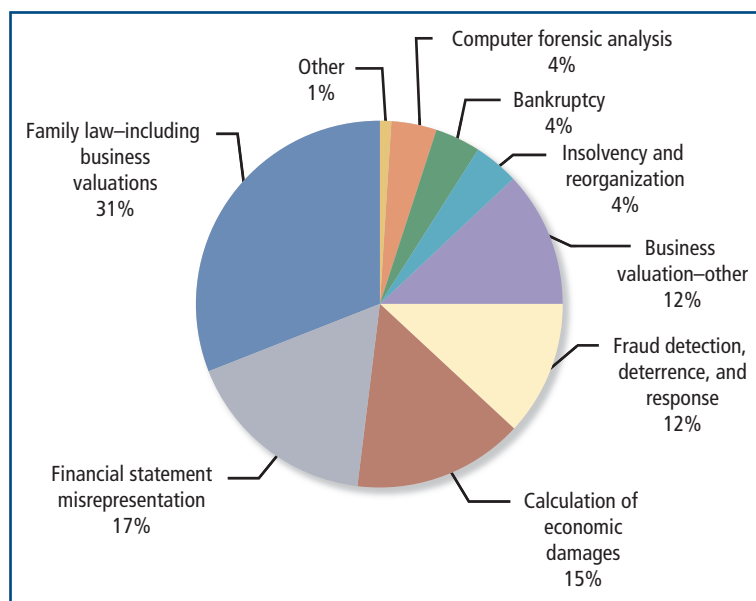


Figure 1-1
Forensic Accounting Practice Components

Source: AICPA 2011 Forensic and Valuation Services Trend Survey

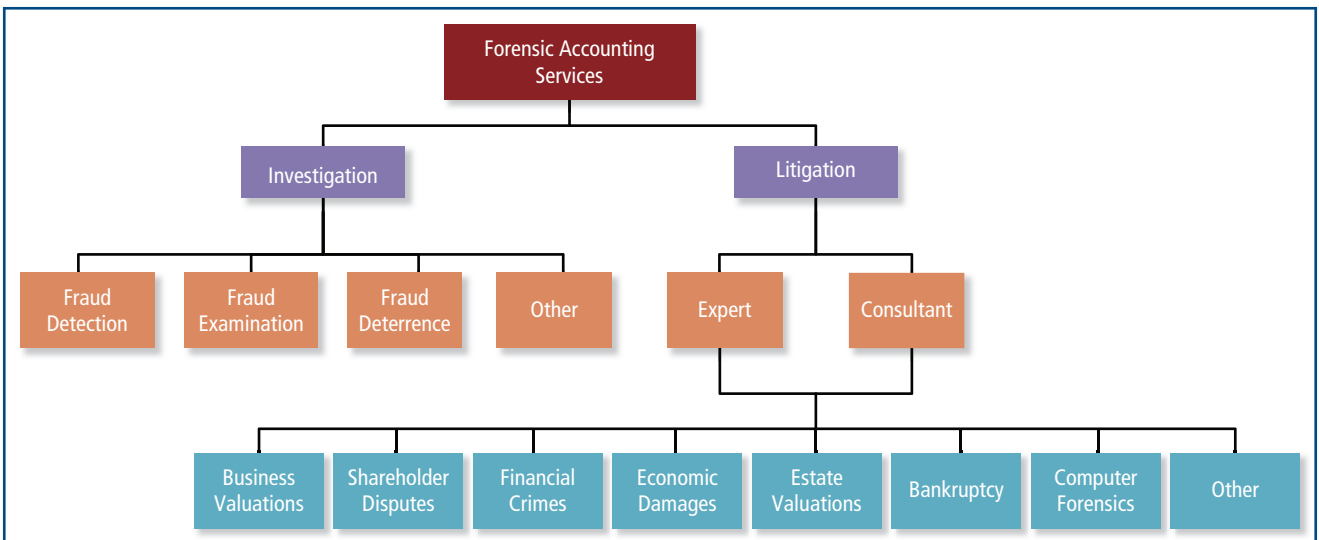


Figure 1-2
Categories of Forensic Accounting Services

As illustrated in Figure 1-2, forensic accounting services are commonly divided into two major components: investigative services and litigation services.

Special Note

The framework depicted in Figure 1-2 is advocated by the AICPA’s Code of Professional Conduct (hereinafter the “Code”). In the context of the Code, this framework is intended to address independence in the performance of nonattest services (ET §101.05).¹⁴ Although qualified in the Code as being limited in use (p. 1728, footnote 25), these categories have been embraced in practice.

As will be emphasized throughout this text, forensic accounting services are engagement-specific. Even so, all forensic accounting engagements share four common phases:

1. Defining the engagement—the “why”
2. Discovery—gathering evidence
3. Analysis—interpreting evidence
4. Communication—presenting evidence (opinions) orally or in writing

The remaining chapters of this text guide you through each of these phases within the context of investigative services and litigation services.

Investigative Services

As defined by the Code (ET §101.05, p. 1730), forensic accounting *investigative services* include all forensic accounting engagements that do not (at least at the outset) involve actual or threatened litigation. An investigation is defined as a systematic inquiry, search, or research to obtain facts regarding a specific or general concern or concerns.¹⁵ Investigative services provided by forensic accountants are generally related to corporate investigations, which are initiated for the purpose of protecting the organization and its assets from internal or external threats (for example, employee fraud, misappropriation of assets, financial statement fraud, or corruption). Specific types of forensic accounting investigations include fraud detection, fraud examination, and fraud deterrence.

Fraud Detection

As the name implies, *fraud detection* is simply the discovery of fraud. Fraud detection includes a variety of strategies, such as internal control procedures, statistical analysis,

financial statements analysis, and anonymous reporting channels (such as hotlines). Importantly, detective procedures are designed to identify an error or irregularity *after* it has occurred, whereas preventive procedures (discussed in a later section) are designed to discourage such occurrences *before* they happen. But *how* are frauds actually detected?

Fraud studies consistently identify tips as the most common source of fraud detection, thus highlighting the need for reporting channels. For example, a 2012 study by the Association of Certified Fraud Examiners (ACFE) reports that 43.3% of occupational frauds are detected by tips.¹⁶ According to this same study, more than half of all tips (50.9%) come from employees, followed by customers (22.1%), anonymous sources (12.4%), and vendors (9%). A distant second source of fraud detection is management review (14.6%), followed by internal auditors (14.4%), and detection by accident (7%). Interestingly, the ACFE study reports that only 3.3% of occupational frauds are detected by external auditors. Thus, although auditors play an important role in fraud deterrence (discussed in the “Fraud Deterrence” section), they cannot be relied on to detect fraud.

Fraud Examination

A *fraud examination* is conducted *after* the fact, that is, in response to some indication of a crime. Its purpose is to investigate specific allegations or suspicions of fraud. The primary focus of a fraud examination is to determine the following elements of the fraud: *who* committed the fraud, *how* they committed it (the fraud scheme), *when* it was committed (time frame and duration), *how much* was taken, and *who else* was involved. The *why* (need or motive), although important to our overall understanding of fraud, is not the immediate challenge.

The forensic accountant employs a systematic and scientific approach in the discovery, analysis, and determination of alleged fraudulent activity. As highlighted throughout this text, a fraud examination is an evolutionary process that adjusts as new evidence is gathered and evaluated.

A forensic accountant may conduct the entire investigation from start to finish or may be retained to investigate only a specific component. In either situation, the forensic accountant commonly works together with other interested parties, including legal counsel, corporate security, internal and external auditors, and management representatives.

Special Note

An operative first step in a fraud investigation is to confirm the existence of an investigation policy and, if one exists, secure a copy to ensure compliance. An investigation policy identifies the process and interested parties and establishes investigative and reporting protocols. Such policies are designed to ensure that investigations are carried out promptly and in a fair and equitable manner to the individuals involved, allowing them an opportunity to respond to the matter under investigation. Moreover, investigation policies establish thresholds for identifying significant issues worth pursuing.

Fraud Deterrence

Fraud deterrence differs from fraud detection and fraud examination in that it describes *proactive* (rather than *reactive*) strategies. Such deterrence strategies include both short-term and long-term initiatives. Examples of short-term (or procedural) strategies include evaluation of hiring practices, internal controls, and performance monitoring. Because fraud requires individual actors (the offenders), a reasonable starting point for fraud deterrence is employee relations. Long-term strategies are more abstract in nature, addressing issues such as organizational culture and the tone set by top management (that is, “tone at the top”).

Proactive employee strategies include preemployment screening, employee training, employee monitoring, perception of detection (through internal controls and external audits), and organizational culture. Aside from a policy of not hiring criminals, we contend that the most effective means of fraud deterrence is promoting the expectation (perception) among employees that wrongdoers will be caught and that punishment will be swift and appropriate for the offense.

Working Analogy

A simple analogy for explaining the distinction between detection, investigation, and deterrence is unhealthy weight gain.¹⁷

- Detection = identification of the specific health concern (that is, unhealthy weight gain)
 - In its early stages, weight gain can be detected by scales; as the problem progresses, it becomes more visibly noticeable.
- Investigation = identification of the factors that caused the weight gain
 - Potential explanations include changes in diet, alcohol consumption, sleeping patterns, stress, work, family, or exercise.
- Deterrence = addressing the causal factors
 - Mitigating strategies include improved diet (both food selection and consumption) and increased physical activity.

Other Investigations

In addition to the fraud-related investigations previously discussed, forensic accountants are commonly engaged to conduct investigations unrelated to fraud. Examples of such investigations include whistleblower complaints and financial viability concerns. A **whistleblower complaint** is a disclosure by a person (usually an employee) of wrongdoing or misconduct within the organization.¹⁸ Usually, a forensic accountant is utilized when the allegation is considered serious (for example, involving senior management) or when the appearance of independence is important. **Financial viability investigations** include short- or long-term assessments of financial and managerial sustainability (related to concerns of customers, vendors, or investors) or the reasonableness of insurance claims (such as lost profits or business interruption).

Litigation Services

As defined by the Code (ET §101.05, pp. 1728–29), forensic accounting **litigation services** are provided in connection with actual, pending, or potential legal or regulatory proceedings—criminal or civil. These services are segregated into expert witness (testifying) services and consulting (nontestifying) services.

Expert Witness Services

All evidence in a trial is presented by witnesses. A witness, as defined by *Black's Law Dictionary*, is “one who gives testimony in a cause before a court.”¹⁹ There are two types of witnesses: *fact witnesses* and *expert witnesses*. As the name implies, a **fact witness** testifies about the facts—his or her firsthand knowledge about a fact in issue or person involved in the litigation. An **expert witness**, on the other hand, is an individual with scientific, technical, or other specialized knowledge who is engaged to assist the “trier of fact” (a judge or jury) to understand the evidence or to determine a fact in issue. Importantly, expert witnesses differ from fact witnesses in that they can express *opinions*. As will be discussed in Chapter 2, an expert’s opinion must be based on sufficient facts or data, be the product of reliable methodology, and be case-specific.

As emphasized throughout this text, forensic accountants providing expert witness services have a duty to the court, the public, and the profession to offer *objective* and *independent* opinions that will assist the trier of fact. This is no small task, given the adversary–advocacy nature of the field. These challenges and the forensic accountant’s professional responsibilities are discussed in detail in Chapter 10.

Consulting Services

A forensic accountant may also be engaged by an attorney as a **consulting expert**. In this role, unlike the role of a testifying expert, the consultant assists an attorney in advocating

for the client. Consulting experts perform many of the same tasks as testifying experts, with the exception of offering expert testimony. Depending on the circumstances of the specific engagement, a consulting expert may serve only a peripheral role or may participate in several aspects of the case, including the development of key arguments.

FORENSIC ACCOUNTANTS VS. TRANSACTIONAL ACCOUNTANTS AND AUDITORS

Forensic accountants differ in many respects from transactional accountants and auditors. These differences flow primarily from their respective objectives. To enhance your understanding of forensic accounting, let's compare these roles.

Transactional Accountant

Accountants working for an organization employ generally accepted accounting principles (GAAP) to process information useful in decision making. The accounting process has three basic steps: recording, classifying, and summarizing. To facilitate this process, transactional accountants require core accounting skills. Most have undergraduate degrees in accounting, and many have one or more professional certifications, such as Certified Public Accountant (CPA), Certified Management Accountant (CMA), or Certified Internal Auditor (CIA).

Internal Auditor

Aside from management, the first line of defense against accounting failures within an organization is the internal auditor, whose responsibilities extend beyond the processing functions of a transactional accountant. The internal auditor's function is to report on the adequacy of internal controls, the accuracy and propriety of transactions, the extent to which assets are accounted for and safeguarded, and the level of compliance with a company's internal policies as well as external laws and regulations. This function exists to support the other three representatives of an organization: the board of directors (BOD), executive management, and the external auditor. In addition to core accounting skills, internal auditors must possess critical thinking, problem-solving, and communication skills.

External Auditor

External auditors, who work for CPA firms, are hired by organizations to evaluate their internal control systems and test their transactions and accounts to ensure that all economic events are recorded and reported in the proper accounting period. The purpose of the external auditor is to form and express an opinion as to whether the organization's financial statements, taken as a whole, reflect its financial position on a given date and the results of its operations for a given period. An unqualified (clean) opinion from the external auditor adds credibility to the organization and its financial statements. Skills required by external auditors are similar to those for internal auditors.

As summarized in Table 1-2, the objectives and processes of forensic accountants vary significantly from those of transactional accountants, internal auditors, and external auditors.

FORENSIC ACCOUNTING SKILLS

In 2009, Davis, Farrell, and Ogilby surveyed a mix of attorneys, CPAs, and academics to gain a better understanding of the dominant skills and characteristics of effective forensic accountants.²⁰ The diversity of the survey respondents is significant because it provides information from different points of view: attorneys (consumers of forensic accounting services), CPAs (providers of forensic accounting services), and academics (initial educators of forensic accountants). Three essential characteristics or skills identified in the study (and consistent with our experience) are critical thinking, reasoning, and communication.

Table 1-2 | Comparative Analysis: Accountant, Auditors, and Forensic Accountant

	Transactional Accountant	Internal Auditor	External Auditor	Forensic Accountant
Timing	Day-to-day and month-to-month	Conducted according to a plan or because a deficiency has been identified	Conducted on a recurring basis	Conducted on an as-needed (nonrecurring) basis
Scope	Manage the organization's accounting and internal control system	Validate effectiveness of controls in various processes or areas of the organization	Examination of the financial data	Defined by the specific engagement
Objective	Capture and record all economic transactions of the organization	Ensure compliance with policy and procedures; offer recommendations for improvement of internal controls	Form an opinion on the overall financial statements taken as a whole	Address a specific question/issue
Purpose	Prepare financial statements for decision makers	Required by the BOD based on overall corporate risk assessment	Usually required by third-party users of financial statements	Defined by the specific engagement
Value	Information useful for decision-making purposes	Provides assurance that management is adequately identifying and mitigating risks	Adds credibility to reported financial information	Completion of stated engagement objective
Source of Evidence / Methodology	Original transactions for the acquisition and employment of assets, liabilities, equity, revenue, and expense in the conduct of business	Inquiry, observation, examination, and testing of processes	Inquiry, observation, examination, and reconstruction of accounting transactions to support financial statement representations	Review detailed financial and nonfinancial data, search public records, conduct interviews, and make observations
Sufficiency of Evidence	Reasonable assurance	Reasonable assurance	Reasonable assurance	Establish facts to support the conclusion/opinion
Audience	Management at all levels and the BOD	Executive management and the BOD	Serves the public interest, specifically investors and other stakeholders	Engaging party

Critical Thinking

As previously discussed, forensic accountants provide services in a variety of engagements. Most (if not all) involve **critical thinking**. Commonly identified attributes of critical thinkers include:²¹

- Rational—Considers all known evidence in an unbiased manner
- Skeptical—Suspends judgment to allow proper consideration of evidence, context, and methodologies
- Reasonable—Measures behaviors and conclusions with sound judgment and common sense
- Well-informed—Possesses adequate and reliable information
- Open-minded—Free of bias and receptive to new information and ideas from others



- Self-aware—Cognizant of one’s own emotions and biases and how they impact decisions
- Persistent—Resists jumping to conclusions

What Is Critical Thinking?

John Dewey (1933), who is widely recognized as the father of modern critical thinking, defined it as “active, persistent, and careful consideration of a belief or supposed form of knowledge in the light of the grounds which support it and the further conclusions to which it tends.”²² Several other definitions are presented in the following list, in chronological order, to illustrate key (recurring) themes and demonstrate the development of the concept over time.

- McPeck (1981) defined critical thinking as “the propensity and skill to engage in an activity with reflective skepticism.”²³
- Brookfield (1987) defined it as a process in which individuals recognize and re-search assumptions that challenge their thoughts and actions.²⁴ Brookfield identified five activities and processes that take place when individuals are thinking critically:
 - Critical thinking is a productive and positive activity that requires active engagement with life.
 - Critical thinkers continuously question assumptions; therefore, critical thinking is a process and not an outcome.
 - The thinking processes of critical thinkers vary enormously according to the contexts in which it occurs.
 - Critical thinking results from individuals experiencing positive and negative events that can initiate the process of questioning previously trusted assumptions.
 - Critical thinkers find emotions central to the critical thinking process, allowing them to be emotive and rational with their assumptions.
- Lipman (1988) defined critical thinking as an activity involving “skillful, responsible thinking that facilitates good judgment because it: (a) relies upon criteria, (b) is self-correcting, and (c) is sensitive to context.”²⁵
- Ennis (1996) perceived critical thinking as “a process, the goal of which is to make reasonable decisions about what to believe and what to do.”²⁶
- The AICPA (1999) defined critical thinking as the “ability to link data, knowledge, and insight together from various disciplines to provide information for decision making.”²⁷
- Banning (2006) characterized it as a process of evaluating and reflecting on information gathered from multiple sources to make judgments that lead to the development of a thought or action.²⁸

A common theme among these definitions is the idea of questioning assumptions, particularly with respect to cause–effect relationships. A critical thinker exercises judgment, using criteria developed from past observations and experiences. This process is flexible and highly sensitive to the context in which it occurs. Finally, critical thinking should ultimately influence decision making and thus lead to action.

The Value of Critical Thinking

Critical thinking is a necessary skill for any type of investigation, research, or scientific inquiry. As will be emphasized throughout this text, the analytical processes employed by forensic accountants are based on a scientific approach. This involves (1) identifying a question, (2) gathering sufficient relevant data, (3) analyzing the data, (4) drawing conclusions, and (5) communicating results. In this context, critical thinking serves as a guiding frame to preserve the integrity of the scientific process. Various threats to the integrity of this process are manifested in the concept of “blind spots.” Blind spots are caused by mistakes in reasoning, human irrationality, biases, distortions, and self-interest. As humans,

we all have blind spots. However, by exercising critical thinking, we can more easily detect our own blind spots as well as those of others.

Dig Deeper

The concept of blind spots can be further examined via a “poles apart” assignment. This exercise requires you to choose an issue you feel strongly about, research it, and present arguments supporting both sides of the debate. The objective, of course, is to develop your critical thinking skills—from “what” to think to “how” to think.

Reasoning

Reasoning is a problem-solving skill that involves drawing inferences or conclusions from known or assumed facts.²⁹ Reasoning is closely associated with critical thinking in that it is a rational process of attempting to understand an event or behavior. Just like the iconic Sherlock Holmes, forensic accountants use both deductive and inductive reasoning to identify clues and patterns of behavior, gather and evaluate evidence, question arguments, and develop conclusions.

Deductive Reasoning

Let’s first consider **deductive reasoning**, which is defined as “reasoning from the general to the specific, or from the premises to a logically valid conclusion.”³⁰ In other words, you first identify two or more general premises (either known or assumed to be true) and then apply these accepted truths to a specific situation. Importantly, deductive conclusions are statements of certainty that imply 100% confidence.

Consider this classic example of deductive reasoning:

Major Premise	All men are mortal.
Minor Premise	Socrates is a man.
Conclusion	Socrates is mortal.

Let’s now consider the case of *U.S. v. Capone* and the net worth method:

Major Premise	You can’t spend what you don’t have.
Minor Premise	Capone spent more than he reported (which was nothing).
Conclusion	Capone underreported his income (indicating tax evasion).

These examples illustrate the basic idea of deductive reasoning: The conclusion is arrived at through the underlying premises. Importantly, no new information is provided. If something is true in general (all men are mortal), then it is true for a class of things (Socrates is a man), and that truth applies to all members of the class (Socrates is mortal). The certainty of deductive reasoning is tied to the truth of the underlying premises. If either of the premises is false, then the line of reasoning fails and the conclusion is unreliable.

Inductive Reasoning

In contrast to deductive reasoning, **inductive reasoning** draws conclusions from patterns. The inductive reasoning process flows from a set of specific observations, facts, or data to a working hypothesis and then a general conclusion (that is, bottom up).

Inductively developed arguments extend beyond their underlying observations, thus facilitating learning from experience. In other words, inductive reasoning allows us to predict future results based on past observations. Due to this predictive aspect, inductive conclusions cannot be 100% certain.

Consider this simple example of inductive reasoning:

Observation: Every time a ball is kicked into the air, it comes back down.

Conclusion: The next time the ball is kicked into the air, it will come back down.

The work of a forensic accountant is *evidence-based*: gathering evidence, analyzing the evidence, and then drawing conclusions. This, in essence, is a process of inductive reasoning.

As such, forensic accountants deal with *probabilities*, not *certainties*. This proposition is central to the legal concepts of “standard of proof” and “reasonable degree of professional certainty,” which are introduced in Chapter 2.

Special Note

Forensic accountants also use *intuitive reasoning*, a subject matter of importance in psychology.³¹ Intuitions are judgments that arise through rapid, nonconscious, and holistic associations.³² Thus, intuitive reasoning can be described as a feeling (or sense) based on how something *seems* rather than facts or data. Forensic accountants are encouraged to embrace intuitive reasoning as a good starting point for inductive reasoning. However, caution must be exercised because intuitions are easily distorted by personal biases and misconceptions.

Communication

As previously noted, the final step of the scientific method is communicating results. In forensic accounting, where there is often a wide knowledge gap between the expert and the audience, this may be the most challenging component of the process. Thus, forensic accountants are expected to have strong communication skills, both written and oral. As will be discussed in Chapter 2, one of the primary responsibilities of a testifying expert is to render an opinion that will assist the trier of fact (judge or jury) in understanding the evidence. To that end, an expert’s opinion must be stated in a legally sufficient manner and must be based on reliable facts, data, and methodology.

Forensic accountants expect their reports, and every word contained therein, to be closely examined and challenged. Thus, all written reports must be clear, concise but comprehensive, and grammatically correct, with a professional tone. As a rule, expert reports prepared in the course of litigation are exempt from professional report writing standards. However, reports prepared outside litigation may be subject to such standards (discussed in Chapter 12), which contain specific requirements for both form and content.

A forensic accountant must also be skilled in oral communication. Whether the communication is with an attorney, a client, a law enforcement officer, or a judge/jury, the ability to relate findings in a simple, professional, and convincing manner is a critical success factor. Because effective communication is a *shared* meaning and understanding, your message must be tailored to the recipient.

Communication failure is often caused by a misunderstanding of the relative importance of the three components of oral communication: (1) body language, which accounts for roughly 55% of the message; (2) voice tone, which accounts for roughly 35% of the message; and (3) words, which account for only 10% of the message.³³ Thus, nonverbal cues are critical: *How* you say it is more important than *what* you say. While delivery can (and should) be practiced, the key to exuding confidence in your message is to actually *be* confident in the quality of your analysis. No amount of “window dressing” can hide an unfounded opinion, especially under challenge such as cross-examination.

Special Note

Forensic accountants are commonly called upon to present evidence to a judge or jury. A recent phenomenon, called the “CSI effect,” describes the enhanced level of expectation among jurors with regard to forensic evidence. Exposure to television portrayals of criminal trials, which often exaggerate the role of forensic evidence, may cause jurors to expect an abundance of such evidence in every trial. If valid, this effect has implications for the findings and presentations of expert witnesses, including forensic accountants. “Jazzing up” a presentation can be an especially difficult task for the forensic accountant, given the tedious and data-intensive nature of many engagements.

In summary, the Davis et al. (2009) study supports our experience that the work of forensic accounting demands different skills from those employed by a traditional accountant. In

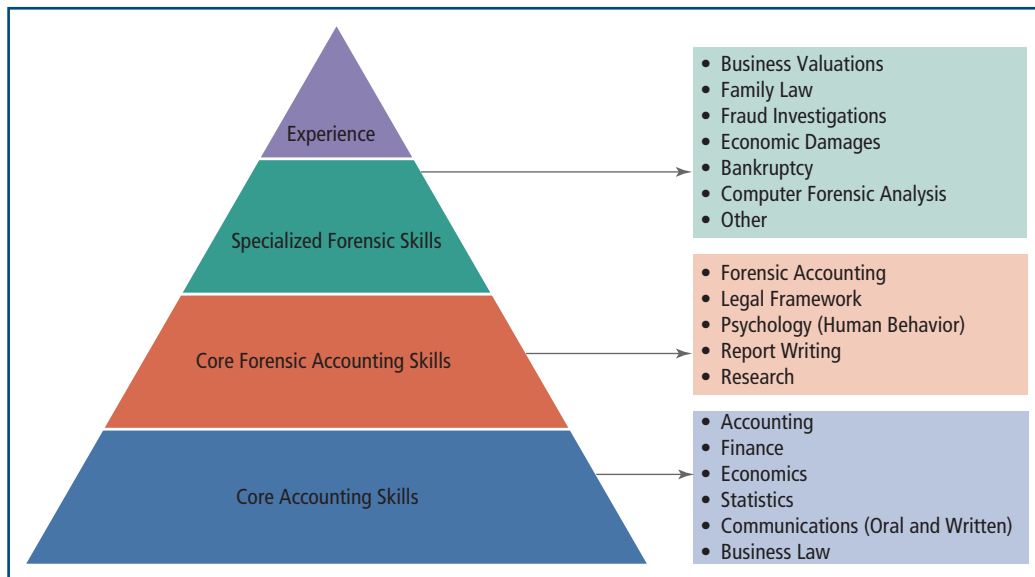


Figure 1-3
Pyramid of Forensic Accounting Skills

In addition to core accounting skills, forensic accountants must have a working knowledge of the judicial process (the legal environment) and the underlying concepts of evidence, discovery, and legally sufficient opinions. Moreover, successful forensic accountants must have specialized knowledge in a variety of practice areas, such as business valuation and fraud investigation. Our pyramid of forensic accounting skills (illustrated in Figure 1-3) is consistent with the AICPA's CFF Core Focus Wheel, an illustrative tool used to identify the requisite skills required to become certified in financial forensics (discussed in the following section).

FORENSIC ACCOUNTING CERTIFICATIONS AND SUPPORTING ORGANIZATIONS

The AICPA estimates that 25,000 CPAs currently provide forensic accounting services.³⁴ This group of specialized practitioners is expected to increase in size, as demand for these services continues to grow. In a 2011 AICPA member survey, the vast majority of respondents (79%) expect a greater demand for forensic accounting services in the next two to five years. Of these respondents, 67% attributed this growth to economic damages calculations, 56% to marital disputes, and 54% to fraud investigations.³⁵ Moreover, the survey confirmed that CPAs represent the vast majority (94%) of forensic experts hired.

Strong demand for forensic accounting services implies a need for practitioners with specialized education and training. Recognizing this need, the American Accounting Association (AAA) has recently created the Forensic and Investigative Accounting (FIA) Section, which is dedicated to the continued improvement of forensic accounting research and education. A number of professional associations offer specialized forensic certifications, continuing education, and networking opportunities. The three most prominent of these associations are identified in Table 1-3.

The Davis et al. (2009) study supports our experience that specialty credentials (see Table 1-3) provide a competitive advantage. To address this need, the AICPA's Forensic and Valuation Services (FVS) Section offers two forensic accounting credentials: the Certified in Financial Forensics (CFF) credential and the Accredited in Business Valuation (ABV) credential. To become a CFF or ABV credential holder, candidates (CPAs)

Table 1-3 | Forensic Accounting Credentials

Association	Specialized Certifications	Web Address
American Institute of Certified Public Accountants (AICPA)	Accredited in Business Valuation (ABV) Certified in Financial Forensics (CFF)	www.aicpa.org
National Association of Certified Valuators and Analysts (NACVA)	Certified Valuation Analyst (CVA) Certified Forensic Financial Analyst (CFFA)	www.nacva.com
Association of Certified Fraud Examiners (ACFE)	Certified Fraud Examiner (CFE)	www.acfe.com

must successfully pass the CFF Exam or ABV Exam and meet minimum experience and education requirements.

Following are the major areas of the body of knowledge covered in the CFF exam and the ABV exam, along with the location of this subject matter in our text:

CFF Exam

- Professional responsibilities and practice management—Chapter 10
- Fundamental forensic knowledge—Chapter 2
- Specialized forensic knowledge, such as fraud, business valuations, computer forensics, and economic damages calculations—Chapters 6, 7, 11, and 12

ABV Exam

- Qualitative and quantitative analysis—Chapters 8 and 9
- Valuation analysis—Chapter 11
- Related topics, such as defining the engagement and professional standards—Chapters 3–5

Aside from the AICPA's offerings, the National Association of Certified Valuators and Analysts (NACVA) is currently the industry leader in forensic accounting training. Although NACVA is best known for its business valuation credential—Certified Valuation Analyst (CVA)—its portfolio of offerings is much broader. As of the date of this writing, NACVA has trained more than 18,000 CPAs and other consulting professionals in the fields of business valuation, financial forensics, and various related specialty services. Due to NACVA's quality reputation and diversity of offerings, the AICPA has engaged NACVA to develop a course to help CPAs prepare for the qualifying exam for the CFF credential.

CAREERS IN FORENSIC ACCOUNTING

As previously highlighted, professionals with forensic accounting qualifications are in high demand. Table 1-4 lists examples of the many career opportunities for forensic accountants in both the private and public sectors. The salary range for an entry-level position is \$30,000 to \$60,000 per year, depending on the location and the size of the firm. For practitioners with specialized credentials, salaries begin around \$60,000 and can reach six digits with greater experience. Those at the top of this profession earn between \$250,000 and \$500,000 per year.

The forensic accounting profession offers great variety, including roles for individuals with different skills and talents. Of course, not everyone is cut out for expert witness testimony. Some may prefer to work “behind the scenes,” focusing more on analytical tasks. As you work through this text, you will get a better idea of where you may fit into the world of

Table 1-4 | Careers in Forensic Accounting

Employer	Position
Various companies / organizations	Internal Auditor Compliance Officer
CPA / consulting firms	External Auditor Valuation Analyst Expert Witness Consulting Expert Fraud Investigator
Insurance companies	Claims Examiner Fraud Investigator
Law enforcement (state and federal)	Documents Examiner Digital Analyst Forensic Analyst (FBI) Special Agent (FBI)
Regulatory agencies (for example, Federal Reserve or SEC)	Financial Analyst Examiner
Internal Revenue Service	Tax Examiner Tax Specialist Tax Compliance Officer Internal Revenue Agent Criminal Investigator
Government Accountability Office	Financial Analyst Financial Auditor Criminal Investigator

forensic accounting. Moreover, the foundational knowledge it offers is widely applicable in many other professions.

SUMMARY

Forensic accounting is a dynamic field that continues to grow in both size and significance in the United States and around the world. Although forensic accounting services are engagement-specific, all forensic accounting engagements share four common phases: (1) defining the engagement, (2) collecting evidence, (3) analyzing evidence, and (4) communicating results.

Forensic accounting students (and practicing forensic accountants) are frequently asked to explain what forensic accounting is and what makes it different from traditional accounting. Forensic accountants receive specialized training in investigations and the legal environment, including discovery, evidence, methodology, judicial process, burden and standard of proof, and formation and expression of expert opinions. Forensic accountants are thus uniquely qualified to assist counsel in civil or criminal litigation, as a testifying or

consulting expert. Moreover, forensic accounting assignments are “engagement-specific,” with each having a different purpose, a unique set of challenges, and its own cast of characters.

Successful forensic accountants are differentiated by their abstract skills, including critical thinking, reasoning, and communication. To develop these competencies, a mix of formal education, practical experience, and specialized training is necessary.

Key Terms

Consulting expert	Fraud examination
Critical thinking	Inductive reasoning
Deductive reasoning	Intuitive reasoning
Expert witness	Investigative services
Fact witness	Litigation services
Financial viability investigation	Mindset
Forensic accounting	Reasoning
Fraud detection	Whistleblower complaint
Fraud deterrence	

Chapter Questions

- 1-1.** For what crime was Al Capone convicted and sent to prison?
- 1-2.** Frank J. Wilson is considered to be the first forensic accountant in the United States. What method did he use to determine Al Capone’s unreported taxable income? Explain how this method works.
- 1-3.** Define forensic accounting.
- 1-4.** What is meant by a forensic accountant’s mindset?
- 1-5.** What are the four phases of a forensic accounting engagement?
- 1-6.** Discuss the types of investigative services provided by forensic accountants.
- 1-7.** Discuss the types of litigation services provided by forensic accountants.
- 1-8.** Compare and contrast the roles of a testifying expert (expert witness) and a nontestifying (consulting) expert.
- 1-9.** Identify and describe two types of nonfraud engagements a forensic accountant might perform.
- 1-10.** How does the role of a forensic accountant differ from the role of a transactional accountant?
- 1-11.** How does the role of a forensic accountant differ from the role of an external auditor?
- 1-12.** How does the role of a forensic accountant differ from the role of an internal auditor?
- 1-13.** What are the three essential characteristics/skills possessed by a forensic accountant?
- 1-14.** What is meant by critical thinking, and what are the key attributes of this thinking process?
- 1-15.** Define and provide an example of both inductive and deductive reasoning.
- 1-16.** Does a forensic accountant use inductive or deductive reasoning when conducting an engagement? Explain.
- 1-17.** Why are both written and oral communication skills important to a forensic accountant?
- 1-18.** Identify several characteristics of a good written report. Why is the quality of a written report important?
- 1-19.** Discuss the CSI effect as it relates to forensic accounting.
- 1-20.** Identify two associations that provide forensic accounting certifications. How can a certification enhance the career of a forensic accountant?
- 1-21.** What types of organizations hire forensic accountants? How much can forensic accountants expect to earn?